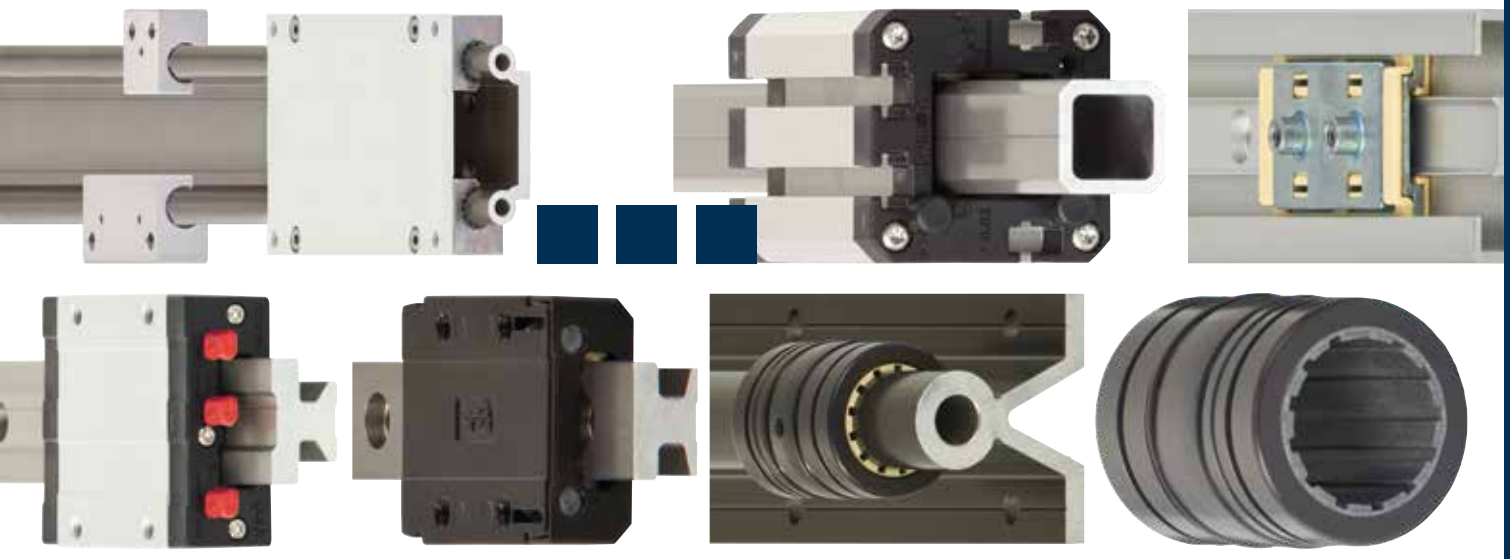
drylin®

Linear technology



...plastics

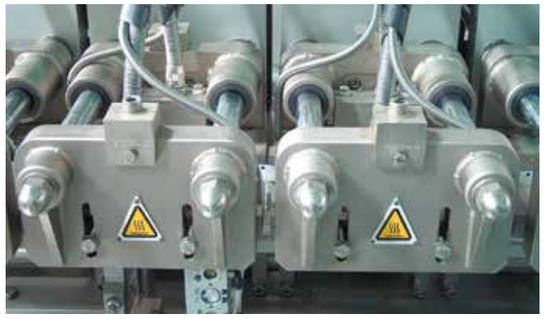
Application examples: drylin®

Improve technology ... Reduce cost.

For years the igus® motto has been "plastics for longer life®". By this we mean the production of innovative plastic products which reduce maintenance work, achieve technical improvements, at the same time as reducing costs and increasing service life, everything delivered immediately from stock. Our references from the practice show the proven employment from drylin® linear guides in a wide variety of applications.

Label feeding system (packaging technology)
Quick and flexible lubrication-free format adjustment at lower costs – implemented with drylin® T rail guide. Further advantage: guide carriage with manual clamp.
(Geset Etikettier-Systeme GmbH, Germany)

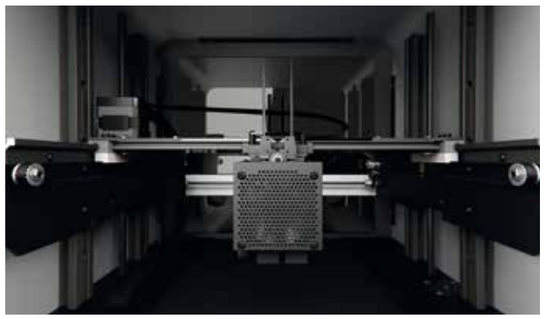
Champagne bottle sealing machine
Due to freedom from lubricants and chemical resistance, drylin® guides score highly in facilities in the food sector. (Sick International Kellereimaschinen GmbH, Germany)



Forming, filling and sealing machine
Lubrication-free drylin® high temperature linear bearings (up to +120°C) are used in the tool guide system of this forming, filling and sealing machine. (Unifill SpA, Italy)

Door adjustment
The smooth, quiet operation and the enormous cost advantages are obtained by the use of drylin® R linear plain bearings on the hard-anodised guide shafts to guide the doors of machine tools. (Alzmetall GmbH + Co. KG, Germany)

System for the production of aluminium cartridges
The absolute freedom from lubricants and the resistance to prevailing paint mist led to the application of drylin® R linear plain bearings. (Mall + Herlan GmbH; Germany)



3D printers
Linear guides of the drylin® T and N series, and the drylin® SD lead screw system travel completely lubrication-free in this 3D printer. This eliminates the risk of contaminating the housing, the filament, and the print result. (Cobot)

Mobile and stationary saw mills
drylin® W modular guide system and iglidur® J liner for adjusting the saw blade guide.
(Serra Maschinenbau GmbH, Germany)

drylin® W profile guides

Single rails, square:

WSQ-XX

▶ Page 976

Pillow blocks, square:

WJ200QM

▶ Page 977

Single rails, round:

WS-XX

▶ Page 978

Single rails, round made of stainless steel:

WS-XX-ES-(FG)

▶ Page 979

Pillow blocks, round:

WJ200UM

▶ Page 980

Pillow blocks, round made of stainless steel:

WJUM-XX-ES-(FG)

▶ Page 980

Tandem pillow blocks:

WJ200UMT-XX-AL

▶ Page 981

Manual clearance adjustment:

WJ(200)UME

▶ Page 982

drylin® W profile guides

With spring pre-load:

WJ(200)UM-XX-P

▶ Page 983

Pillow blocks, single, round:

WJ200UMA-XX-AL

▶ Page 984

Double rails:

square/round

WSQ-/WS-XX-XX

▶ Page 986/992

High torsional rigidity: high profile rails

WSX

▶ Page 987/993

Linear guides – lightweight, non-metallic:

WSPC

▶ Page 988

Linear guides – lightweight, non-metallic:

WSPG

▶ Page 989

Complete carriages: square/round

WW/WWQ

▶ Page 990/995

Mono-slide carriages:

WWC

▶ Page 991

drylin® W profile guides

Round double rail, made of stainless steel:

WS-XX-XX-ES-(FG)

▶ Page 994

Assembled stainless steel guide carriage, round:

WW-XX-XX-GESG-PES

▶ Page 996

Curved rail profiles:

WSB

▶ Page 998

Single bearings for curved rails:

WI3UBP-XX-LLZ

▶ Page 1000

Carriages for curved rails:

WWB

▶ Page 1001

Double rails with machine recesses:

WS(Q)-XX-CAM

▶ Page 1002

Complete carriages for slider:

WW-XX-SL

▶ Page 1003

Hybrid slider carriages with four double roller bearings:

WWH-XX-SL

▶ Page 1004

drylin® W hybrid roller bearings

New

Hybrid rail for lateral installation:

WSR

▶ Page 1010

New

Hybrid roller bearing for hybrid lateral rail:

WJRM-31/41

▶ Page 1011

Single hybrid roller bearings:

WJRM-01

▶ Page 1012

Double hybrid roller bearings:

WJRM-21

▶ Page 1013

Hybrid single and double rollers, stainless steel:

WRJM-XX-ES-FG

▶ Page 1014

Hybrid carriages for lateral installation:

WWR-21-XX

▶ Page 1015

Hybrid carriages with four double roller bearings:

WWH-21

▶ Page 1016

Hybrid carriages for horizontal installation:

WWH-10

▶ Page 1017

drylin® W hybrid roller bearings

New

Mounting plate for drylin® W hybrid roller bearing:

WWYR

▶ Page 1018

drylin® linear technology – Accessories

Manual clamp for simple positioning:

WHKA-XX-(AL)/WHKAQ

▶ Page 1020/1021

Manual clamp for higher holding force:

WHKD

▶ Page 1021

Manual clamp for drylin® W hybrid roller bearings:

WJRM-21-XX-HKA

▶ Page 1022

Liners made from dry-tech® polymers:

▶ Page 1023

Plastic liners:

J200UMA-XX

▶ Page 1024

End caps for drylin® high profile rails WSX:

WSX-XX-EC

▶ Page 1025

drylin® linear technology – Accessories

New

Mounting plate for linear carriage:
WWY
▶ Page 1026

drylin® N low-profile linear guides

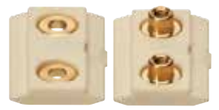
For small spaces and high load capacity:
Installation size 17
▶ Page 1034

The largest variety of carriages (options):
Installation size 27
▶ Page 1036

Suitable for aluminium construction profiles:
Installation size 40
▶ Page 1038

High loads with reduced height:
Installation size 80
▶ Page 1040

Prism rails:
NSV-01-27
▶ Page 1042



Prism carriages:
NWV-XX
▶ Page 1043

drylin® N low-profile linear guides

Accessories:
Manual clamp
NW-XX-HKA
▶ Page 1046

Accessories:
End cap
NSKB, NSK
▶ Page 1047

drylin® NT telescopic rails

Telescopic rails:
NT-35
▶ Page 1050

Telescopic rails with locking mechanism:
NT-LM-35
▶ Page 1051

New

Telescopic guide for higher loads:
NT-60
▶ Page 1052

drylin® T rail guides

Guide rails:
TS-01
▶ Page 1060

High performance carriages:
TW-12
▶ Page 1061

drylin® T rail guides

Manual clearance adjustment:
TW-01
▶ Page 1062

Automatic clearance adjustment:
TWA-01
▶ Page 1063

With manual clamp:
TW-01-XX-HKA
▶ Page 1064

Heavy-duty version:
TW-02
▶ Page 1065

Compact design:
TW-03
▶ Page 1066

Accessories:
TWBM-11
▶ Page 1067

Accessories:
TWBM-01
▶ Page 1067

Miniature guides:
TW-04
▶ Page 1068

drylin® T rail guides

Adjustable miniature guides:
TWE-04
▶ Page 1069

Accessories:
End caps for holes
TSZ
▶ Page 1070

Accessories:
Replacement plastic sliders
TEK
▶ Page 1070

drylin® R liners made from iglidur® J

Long, closed design for shafts:
JUM-01
▶ Page 1080

Long, open design for supported shafts:
JUMO-01
▶ Page 1081

Long, closed design, precise:
JUM-11
▶ Page 1082

Long, open design, precise:
JUMO-11
▶ Page 1083

... made from iglidur® J

Short, closed design for shafts:
JUM-02
▶ Page 1084

... made from iglidur® J200

Long, closed design for shafts:
J200UM-01
▶ Page 1085

Long, open design for shafts:
J200UMO-01
▶ Page 1086

... made from iglidur® E7

Long, closed design for shafts:
E7UM-01
▶ Page 1087

Long, open design for supported shafts:
E7UMO-01
▶ Page 1088

Short, closed design for shafts:
E7UM-02
▶ Page 1089

... made from iglidur® X

Long, closed design, high temperature:
XUM-01
▶ Page 1090

Long, open design, high temperature:
XUMO-01
▶ Page 1091

Short, closed design, high temperature:
XUM-02
▶ Page 1092

... made from iglidur® A180

Long, closed design for shafts:
A180UM-01
▶ Page 1094

Long, open design for supported shafts:
A180UMO-01
▶ Page 1095

... made from iglidur® A160

Long, closed design for shafts:
A160UM-01
▶ Page 1096

drylin® R special designs

Slide disks for large force displacement
RSDJ
▶ Page 1098

Clip-on liners
JUCM
▶ Page 1099

Press-fit bearings made from iglidur® L100
WLM/WLFM
▶ Page 1100/1101

drylin® R solid plastic bearings

Standard design made from iglidur® J
RJM-01
▶ Page 1102

Standard design, precise, made from iglidur® J
RJMP-01
▶ Page 1103

Japanese dimensions made from iglidur® J4
RJ4JP-01
▶ Page 1104

Low-cost made from iglidur® J260
RJ260UM-02
▶ Page 1105

drylin® R linear plain bearings

Closed aluminium adapters
RJUM-01
▶ Page 1106

Closed aluminium adapters, precise
RJUM-11
▶ Page 1107

Closed adapters made of stainless steel 303
RJUM-ES
▶ Page 1108

Closed, anodised aluminium adapters, short design
RJUM-02
▶ Page 1109

Closed, anodised aluminium adapter
RE7UM-01
▶ Page 1110

Closed, anodised aluminium adapters, short design
RE7UM-02
▶ Page 1111

Closed aluminium adapters floating bearings
RJUM-03
▶ Page 1112

Split aluminium adapters
TJUM-01
▶ Page 1113

drylin® R linear plain bearings

Split aluminium adapters, floating bearings
TJUM-03
▶ Page 1114

Open, anodised aluminium adapters, for supported shafts
OJUM-01
▶ Page 1115

Open aluminium adapters, floating bearing
OJUM-03
▶ Page 1116

drylin® R pillow blocks

Closed aluminium adapters, short design
RJUM-05
▶ Page 1118

Closed, adjustable aluminium adapters, short design
RJUME-05
▶ Page 1119

Split aluminium adapters, short design
TJUM-05
▶ Page 1120

Closed aluminium adapters, tandem design
RJUMT-05
▶ Page 1121

drylin® R pillow blocks

Closed aluminium adapters, long design
RJUM-06
▶ Page 1122

Closed aluminium adapters, with manual clamp
RJUM-06-XX-HK
▶ Page 1123

Closed housings, floating bearings
RJUM-06-XX-LL
▶ Page 1124

Open housings, floating bearings
OJUM-06-XX-LL
▶ Page 1125

Open aluminium adapters, long design
OJUM-06
▶ Page 1126

Open aluminium adapters, with manual clamp
OJUM-06-XX-HK
▶ Page 1127

Open, adjustable aluminium adapters, long design
OJUME-06
▶ Page 1128

drylin® R flanged linear plain bearings

Closed aluminium adapters, round flange
FJUM-01
▶ Page 1130

Closed aluminium adapters, square flange
FJUM-02
▶ Page 1132

Closed aluminium adapters, round flange, tandem design
FJUMT-01
▶ Page 1134

Closed aluminium adapters, square flange, tandem design
FJUMT-02
▶ Page 1136

drylin® R pillow blocks

Quad blocks, closed design
RQA
▶ Page 1138

Quad blocks, open design
OQA
▶ Page 1139

Closed tandem design
RTA
▶ Page 1140

Open tandem design
OTA
▶ Page 1141

drylin® R pillow blocks

Closed, long design
RGA
▶ Page 1142

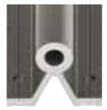
Open, long design
OGA
▶ Page 1143

Closed, short design
RGAS
▶ Page 1144

Open, short design
OGAS
▶ Page 1145

drylin® R shafts

Precision aluminium shafts
AWMP/AWMR
▶ Page 1154



Supported aluminium shafts
AWMU
▶ Page 1155

Steel shafts
SWM/SWMH
▶ Page 1156

Supported steel shafts
SWUM/SWUMN
▶ Page 1157

drylin® R shafts

Stainless steel shafts
EWM/EEWM/EWMR
▶ Page 1158

Supported stainless steel shafts
EWUM
▶ Page 1160

Low level supported stainless steel shafts
EWUMN
▶ Page 1161

Partially supported stainless steel shafts
EWUM-ES/EWUMS-ES
▶ Page 1162

Low level partially supported stainless steel shafts
EWUMN-/EWUMSN-ES
▶ Page 1164

Carbon fibre shafts
CWM
▶ Page 1166

Shaft end supports, floating
TA
▶ Page 1167

Shaft end supports, fixed
TAF
▶ Page 1168

drylin® R shafts

Shaft end blocks, standard design
WA
▶ Page 1169

Shaft end blocks, compact design
WAC
▶ Page 1170

Shaft end block, narrow design
WAS
▶ Page 1171

Flange shaft support
WAF
▶ Page 1172

drylin® Q square linear guides

Square section linear rails
AWMQ
▶ Page 1178

Adjustable linear carriages
QWE-01
▶ Page 1179

Adjustable linear carriages with manual clamp
QWE-01-XX-HKA
▶ Page 1180

Pillow blocks
QJRM(T)-05
▶ Page 1181

drylin® Q square linear guides

Fixed flange bearings with round flange:
QJFM(T)-01
▶ Page 1182

Fixed flange bearings with square flange:
QJFM(T)-02
▶ Page 1182

Solid plastic linear bearings
QJRMP-01
▶ Page 1183

Accessories for drylin® Q
▶ Page 1184

New

Clearance adjustment for columns:
ASDJ
▶ Page 1185

drylin® digital measuring systems

Integrated measuring systems for drylin® Q
QKM
▶ Page 1192

Ready-to-install measuring systems for drylin® SLW linear modules
SLWM
▶ Page 1193

Digital measuring system for drylin® W
WKM2
▶ Page 1194

Measuring system with positionable readout display for drylin® W
WKMEDR
▶ Page 1195

Measuring systems for external data output for drylin® W
WKMEX
▶ Page 1196

drylin® carbon fibre

Extremely lightweight linear guides
WSPC, WWPL
▶ Page 1202

Non-metallic toothed belt axis
ZLW-XX-P
▶ Page 1203

Linear module with carbon fibre high profile
SAW-XX-P
▶ Page 1204

Linear module with carbon fibre hollow shaft
SHTP-XX-CWM
▶ Page 1205

Carbon fibre hollow shafts
CWM
▶ Page 1206

drylin® stainless steel

Closed adapters made of stainless steel 303
RJUM-XX-ES
▶ Page 1209

Stainless steel guides, single/double rails
WS-XX-ES-FG
▶ Page 1210/1213

Pillow blocks, made from 316 stainless steel
WJUM-XX-ES-FG
▶ Page 1211

Hybrid roller bearings made of stainless steel
WJRM-01/WJRM-21
▶ Page 1212

Assembled stainless steel guide carriages, round
WW-XX-GESG-PES
▶ Page 1214

Stainless steel shafts
EWM/EEWM/EWMR
▶ Page 1216

Supported stainless steel shafts
EWUM
▶ Page 1218

Partially supported stainless steel shafts
EWUM-ES/EWUMS-ES
▶ Page 1220

drylin® stainless steel

Low level supported stainless steel shafts
EWUMN
▶ Page 1222

Low level partially supported stainless steel shafts
EWUMN
▶ Page 1224

Stainless steel linear modules
SHT-ESJ
▶ Page 1226

"Hygienic design" linear module
SHTC-XX-HYD
▶ Page 1227

Stainless steel linear modules
SLW-ES
▶ Page 1228

XY tables Stainless steel version
SLW-XY-ES
▶ Page 1229

Reverse modular axes
ZLW-20
▶ Page 1230

Lubrication-free drylin® linear guides

drylin® is a product range of lubrication-free linear plain bearings based on the principle of sliding instead of rolling. Tribologically optimised iglidur® high-performance polymers are used as sliding surfaces. The drylin® linear systems use dry operation and are maintenance-free. Linear guides with rails or shafts are available.
The focus is on, besides the freedom from maintenance and lubrication, the ruggedness and insensitivity to influences such as dirt, water, chemicals, heat or impacts.

- Lubrication-free and resistant to dust and dirt
- High static load capacity
- Light, quiet and clean
- Robust and cost-effective

Typical application areas

- Mechanical engineering
- Wood working industry
- Medical- and rehabilitation technologies
- Interior design (furniture/aircraft)
- Automation

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Service life calculation
▶ **www.igus.eu/drylin-expert**

drylin® rail guides

drylin® W profile guides

- Complex modular systems with more than 30 different profiles and more than 50 carriage options
- Versatile
- Easy installation

▶ **From page 967**

drylin® N low-profile linear guides

- Low profile installation heights from 6 to 12mm
- Lightweight
- Many carriage options – also with pre-load
- Pre-load prism slide for controlled adjustment

▶ **From page 1027**

drylin® T rail guides

- Same dimensions as ball guide systems
- Adjustable bearing clearance
- Automatic clearance adjustment
- High static load capacity

▶ **From page 1053**

drylin® shaft guides

drylin® R shaft guides

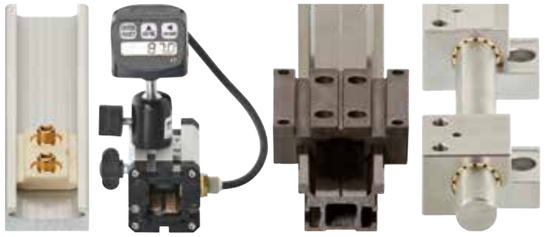
- Same dimensions as recirculating ball bearings
- For all shaft materials
- Lightweight
- Replaceable liners

▶ **From page 1071**

drylin® Q square linear guides

- Lubrication-free, torque-resistant square linear guides
- Lightweight profiles made from hard-anodised aluminium
- Manual adjustable carriages with/without manual clamp
- Numerous fastening options

▶ **From page 1175**



Measuring systems

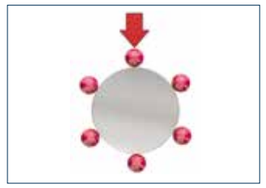
▶ **From page 1187**

Special solutions with carbon fibre and stainless steel

▶ **From page 1199**

drylin® is a range of maintenance and lubrication-free linear plain bearings. This range includes linear units with lead screw, rack and toothed belt drives. The focus is on, besides the freedom from maintenance and lubrication, the ruggedness and insensitivity to influences such as dirt, water, chemicals, heat or impacts.

- Maintenance-free
- Wear-resistant
- Resistant to impacts and vibrations
- Corrosion-free
- Resistant to dirt, dust and humidity
- Low coefficient of friction
- Weight reduction
- Dry operation
- Suited for short-stroke applications
- High static load capacity
- High speeds and accelerations possible
- Self-lubricating
- Extremely quiet operation
- Low magnetism



Rolling bearings – Point contact

Plain bearings – Surface contact

Resistant to dirt, dust and moisture – By lubrication free insert and dirt channels.

Optimum load distribution

drylin® linear plain bearings operate on sliding elements unlike the traditional recirculating ball bearing systems. This gives a larger contact surface resulting in lower surface pressure. This leads to advantages which include:

- The use of non-hardened shafts
- The use of non-metallic shafts
- Scratching and shaft damage is completely excluded

Shafts and rail materials

The large surface area of drylin® linear plain bearings, when compared to traditional ball bearings, means that under a given load the bearing pressure is greatly reduced. This allows soft shaft materials to be used, including hard-anodised aluminium, which in turn gives additional benefits in friction and wear rate values, carbon fibre shafts, which offer the lightest option and stainless steel for the highest chemical resistance. Of course, hardened steel and stainless steel shafts as well as hard-chromed shafts can also be used with drylin® linear bearings.

Dry operation, without lubrication

drylin® linear bearing systems are designed for dry operation. As there is no grease or oil present, the application tends to naturally self clean, any particles are wiped away from the sliding surface by the ribbed design of the drylin® polymer bearing. This works well in coarse dirt or even sand. Particles are repelled from the contact surface by the movement itself. Here the front of the sliders works like a wiper. The contact surface remains clean.

drylin® linear technology | Slides instead of rolling!

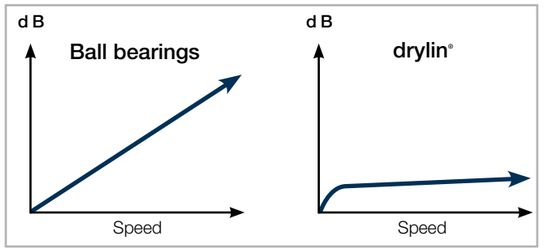
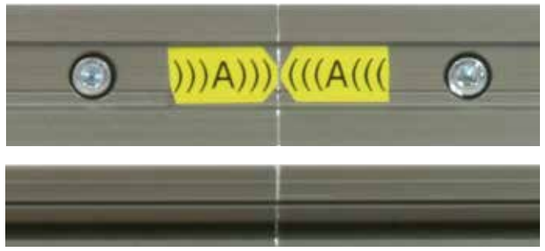


Figure 01: Comparison of noise development

Quiet

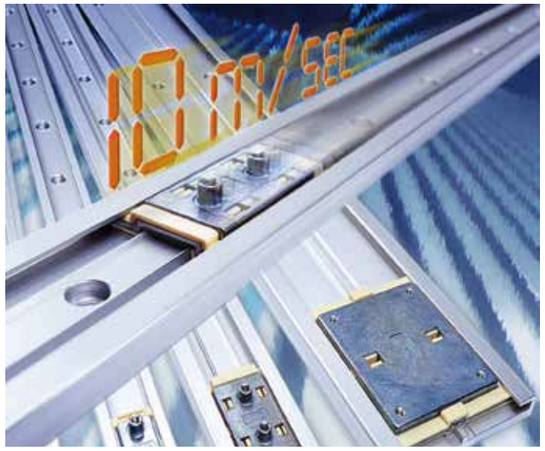
The quiet operation is also a benefit of sliding rather than rolling. There are no loud collisions between a hard steel ball and the shaft or rail. The sliding motion is extremely quiet and only a light friction noise is audible.



Track joint

Maximum stroke lengths

The lining up of guide rails (joining) poses no challenge for drylin® linear guides. The guide rails are slightly chamfered, aligned and simply placed behind each other. The joint can be passed over by the sliding element without problems. With the drylin® linear plain bearings, a ball or roller cannot get stuck. In this way stroke lengths of more than 20 meters can be implemented. Assembly is simplified by the distinctive joint marking provided at the factory.



Thermal conductivity	[W / m · K]
Aluminium	235
Unalloyed steel	48–58
High-alloyed steel	15

Table 01: Thermal conductivity

Average surface speed

= Travel distance per cycle [m] / total cycle time [sec].

Permitted speeds/acceleration

drylin® linear plain bearings do without rollers and balls. This makes the bearing independent of the mass inertia of this body and can be used with high speeds up to 10m/s and accelerations up to 100g.

drylin® linear bearings are therefore especially suitable for applications with light loads, where the speeds should be increased. The use of hard-anodised aluminium as a friction partner lowers the operating temperature in the bearing due to the high thermal conductivity of aluminium. Thus the operation can be carried out with a high frequency even at very short stroke lengths.

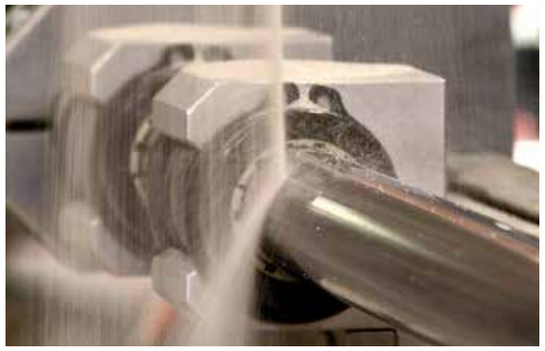
The maximum average surface speed results from the load on the bearings. With decreasing surface load, higher speeds can be achieved. More important than the maximum speed reached is the average speed over a period of time, because this has the most influence on the heating of the bearing system. In cases with breaks between the individual cycles, the maximum average surface speed is critical, which is achieved during a period of 10 to 30 minutes.

drylin® linear technology | Slides instead of rolling!

Extreme application conditions in the offshore industry

Filling machine, Krones AG, Rosenheim (Germany)

The iglidur® X material in heavy-duty use under high temperatures in foundries



Lubrication-free and resistant to dust and dirt

Corrosion behaviour

The low humidity absorption of iglidur® J, J200 and X permits even underwater applications. The application of stainless steel or anodised aluminium shafts provide for a corrosion-resistant guide. Anodised aluminium is resistant to chemically neutral substances in the range pH 2 to 7. For special applications separate tests are recommended for coated aluminium sample parts for that specific application.

Chemical resistance

iglidur® J is resistant to weak acids, diluted alkalis as well as to fuels and all kinds of lubricants. The intensive cleaning of machines with standard commercial cleaning agents, even in the food sector, is therefore not a problem for the guides. For applications in environments with aggressive chemicals, it is recommended to use drylin® R linear bearings equipped with iglidur® X liners. The resistance of linear bearing systems is equally dependent on the counter partner. The most chemical-resistant option can be a high-alloyed steel stainless steel shaft, for instance high grade steel (AISI 440B), or alternatively the use of soft VA steels (e.g. (AISI 316Ti).

Operating temperatures

Sliding elements made from iglidur® J and J200 can be used in the temperature range between –40 and +90°C. The continuous operating temperature for overmoulded sliding elements is +50°C. In applications with aluminium shafts and/or rails, distinctly higher loads and speeds can be attained due to the excellent thermal conductivity. Sliding elements made from iglidur® X can be used in the range of –100°C to +250°C.

Use in dirt

Even the application under coarse dirt and sand is possible. Particles are repelled from the contact surface by the movement itself. Seals can be dispensed with due to the dry operation. Dust and dirt cannot stick to grease or oil.

Hard-anodised surfaces

Hard-anodised surfaces are characterised by good wear properties, high chemical resistance and a high degree of hardness. It is a technical and not a decorative surface. Colour alteration and slight cracking may occur, but do not influence the resistance, the corrosion behaviour or the sliding properties. Cutting surfaces and machined surfaces are uncoated.

drylin® linear technology | Materials

	 The all-rounder – iglidur® J	 The specialist – iglidur® J200	 The extreme – iglidur® X	 The endurance runner – iglidur® E7	 The FDA-compliant – iglidur® A180	 Blue Sky Thinking FDA/EU-compliant iglidur® A160
Application temperature	from –50°C to +90°C	from –50°C to +90°C	from –100°C to +250°C	from –50°C to +70°C	from –50°C to +90°C	from –50°C to +90°C
Best coefficient of friction with	Steel shaft	Hard-anodised aluminium	Hard-chromed steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Volume resistance	> 10^{13}Ωcm	> 10^{8}Ωcm	< 10^{5}Ωcm	> 10^{9}Ωcm	> 10^{12}Ωcm	> 10^{12}Ωcm
Moisture absorption	1.3% weight	0.7% weight	0.5% weight	< 0.1% weight	0.2% weight	< 0.1% weight
Maximum service life with	Hard-anodised aluminium	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Potential counter partner	All shaft materials	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	All shaft materials	Stainless steel
Permissible stat. surface pressure	35MPa	23MPa	150MPa	18MPa	28MPa	15MPa
Part No.	JUM-...	J200UM-...	XUM-...	E7UM-...	A180UM-...	A160UM-...

igus® provides various materials for sliding elements and counter partners for drylin® linear systems. Extensive lab tests and years of field experience have shown that iglidur® J, J 200 and X are the ideal materials for most linear applications due to their favourable wear and friction properties.

Ideal material combinations

iglidur® J:

- Maintenance-free dry operation
- Low coefficient of friction with all materials
- Excellent wear resistance
- Very low humidity absorption

▶ More about iglidur® J ▶ **From page 159**

iglidur® J200:

- Completely maintenance-free
- Extremely high service life on hard-anodised aluminium
- Low coefficient of friction with anodised aluminium
- Excellent wear resistance with anodised aluminium

▶ More about iglidur® J200 ▶ **From page 261**

iglidur® X:

- Completely maintenance-free
- Temperature resistance from –100°C to +250°C in continuous operation
- Universal resistance to chemicals
- Very low humidity absorption

▶ More about iglidur® X ▶ **From page 279**

Other possible materials:

iglidur® A180, FDA-compliant

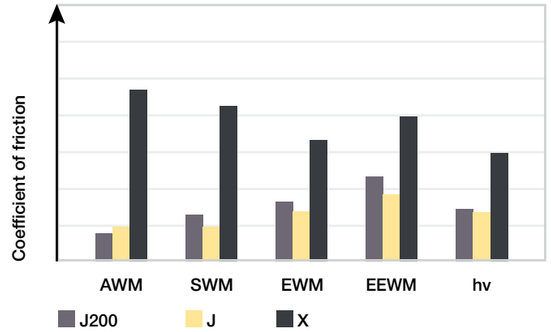
▶ More about iglidur® A180 ▶ **From page 401**

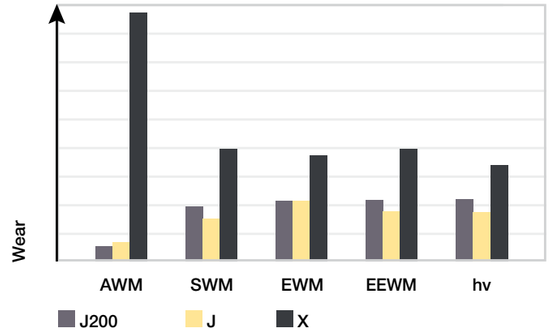
iglidur® A160, Compliant with Regulation (EU) No. 10/2011 and FDA guidelines

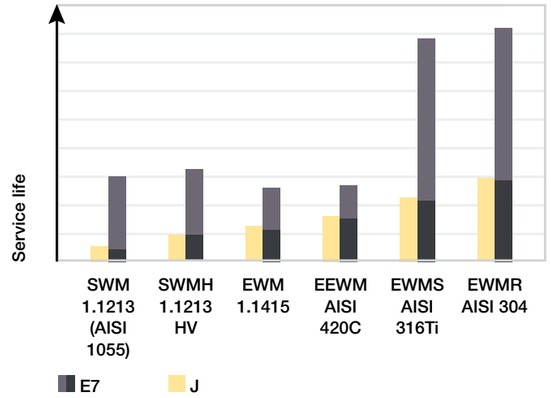
▶ More about iglidur® A160 ▶ **From page 419**

iglidur® E7, the endurance runner all-rounder

▶ More about iglidur® E7 ▶ **From page 267**







drylin® linear technology | Product selection

Properties	Sizes	Lubrication-free and quiet operation	Dimensionally interchangeable with recirculating ball bearings	Profile rails	Shafts	Square profiles	Single pillow block	Complete carriage	Hybrid roller bearing
drylin® W	5	●		●			●	●	●
drylin® N	4	●		●				●	
drylin® Q	3	●				●	●	●	
drylin® T	4	●	●	●				●	
drylin® T mini	4	●	●	●				●	
drylin® R	12	●	●		●		●		

Special criteria	Loads > 100 kg	For robust requirements	Resistant to dirt	Compact, space-saving	Particularly light weight	Torque-resistant	Torsionally stable	Unsupported installation
drylin® W	+	+	++	+	+	+	++	+
drylin® N			+	++	++	+		
drylin® Q			+	+	+	++	+	++
drylin® T	+	+	+			+	+	
drylin® T mini			+	++	++	+		
drylin® R	++	++	++					+

Technical options	Manual adjustable bearing clearance	Automatic adjustable bearing clearance	Automatic pre-load	Floating bearing function	Manual clamp	with measuring system	with lead screw drive	with toothed belt drive
drylin® W	+		++	+	+	+	+	+
drylin® N			++	+	+		+	+
drylin® Q	+				+	+		
drylin® T	+	+		+	+			
drylin® T mini	+			+			+	
drylin® R				+			+	

Application areas	Stainless steel components	Temperatures above +90°C	Chemical-resistant	FDA-compliant	Cleanroom and ESD	Door/control panel adjustments	Camera slider	3D-print components
drylin® W	++	++	++	++	+	++	++	++
drylin® N		+			+	+	+	++
drylin® Q					+			
drylin® T		+			++			
drylin® T mini					+	+		++
drylin® R	++	++	++	++	+			++

+ suitable ++ particularly suitable

drylin® linear technology | Technical data rails/profiles/shafts

Aluminium profiles	
	Aluminium, extruded section according to EN AW 6061/6060

Shafts and rail profiles	Surfaces
drylin® W, drylin® T[155], drylin® R, drylin® Q	hard-anodised, bare surface
drylin® N, profile with CA marking	clear-anodised, bare surface
drylin® N, profile with AR marking	black-anodised (anti-reflect), bare surface

[155] Exception: TS-11-20 clear-anodised

Profile straightness tolerances	
Shafts AWMP/AWMR	DIN 754-3; 2mm/m, local 0.6mm/300mm
Profile rails AWMU/AWMQ, WS/NS/TS	DIN EN 12020-2 Total length up to 1,000mm; Straightness 0.7mm Total length up to 2,000mm; Straightness 1.3mm Total length up to 3,000mm; Straightness 1.8mm Total length up to 4,000mm; Straightness 2.2mm

Length tolerances of the profiles cut-to-length by igus® [mm]

Length	<400	>400–1000	>1000–2000	>2000–4000
Permissible variations of the standard saw length according to DIN ISO 2768-m	±0.5	±0.8	±1.2	±2.0

Minimum rail profile saw lengths [mm]

drylin® W	Hole spacing		Without holes
	C4 = 60[162]	C4 = 120[162]	
Rail profiles WS, WSQ, WSX	100	160	100
drylin® N	C4 = 60[162]	C4 = 150[162]	
Size 17/27 (miniature) NS, NS-AR, NSV, NSV-AR	100	–	70
Size 40/80 NS, NS-AR	100	200	100

drylin® T	C4 = 15/20/25/40	C4 = 60[162]	C4 = 80[162]	C4 = 120[162]	
Installation size 04 (miniature) TS-04	70	–	–	–	70
Installation size 01/11 TS-01/TS-11	–	100	120	160	100

[162] L min: C5 min + C4 + C6 min; saw length examples: drylin® WS-20 rail: C5 min = 20 min; C4 = 120mm; C6 = 20mm; 20mm + 120mm + 20mm = 160mm (min. saw lengths).
Lengths less than the minimum saw length upon request

Minimum shaft/square shaft saw lengths [mm]

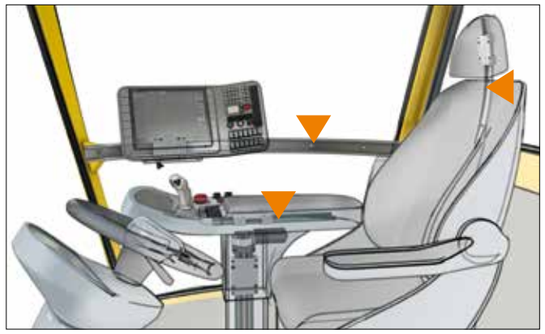
drylin® R	Hole spacing				
Shafts AWMP/AWMR	100				
	T1 = 75[163]	T1 = 100[163]	T1 = 120[163]	T1 = 150[163]	T1 = 200[163]
Supported shaft AWMU	115	140	160	190	240
drylin® Q					
Square profile AWMQ	100				

[163] L min: C5 min + T1 + C6 min; saw length examples: AWMU-20 supported shaft: C5 min = 20mm; T1 = 100mm; C6 min = 20mm; 20mm + 100mm + 20mm = 140mm (min. saw length)
Lengths less than the minimum saw length upon request

drylin® curved linear guide profiles

igus® provides customised curved rails for the drylin® W product range. This is especially for the requirements in operating ergonomics, e.g. guiding monitors and control systems in a radius to ensure safe and easy accessibility. New standards can be set in design and construction with a drylin® curved guide.

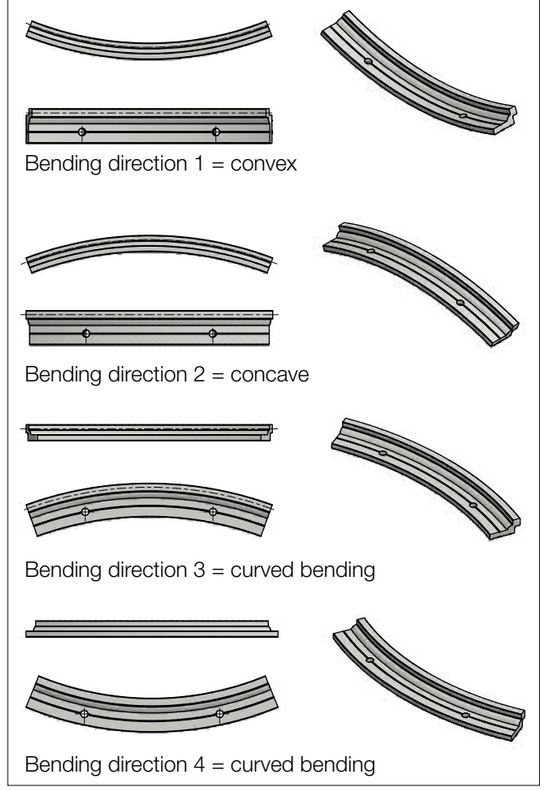
- Lubrication-free drylin® W carriages for curved rails ▶ **Page 1001**
- Variable profile directions
- Torque-resistant alternative to curved tube profiles
- Bending option depending on the radius, rail length, bearing/carriage and mounting
- Customised project service



Curved drylin® linear technology – for ergonomic operation and optimal field of view

Bending can give rise to surface changes (anodising, torsion) as a result of the deformation. Rail profiles with clear anodised (CA) surfaces that are undersized by up to 0.15 below nominal diameters are used to improve the surface finish of the curved rails. We recommend a bend radius of no less than 300mm and would like to point out that the surface finish quality after the bending process depends on the material quality. It may vary from batch to batch.

Bending options



Different radii and bending directions available upon request

Curved rail profiles
▶ Page 998

More Information and checklist online
▶ www.igus.eu/curved

Floating bearings for guide systems

In the case of a system with two parallel guides, one side needs to be fitted with floating bearings. A suitable solution comprising fixed and floating bearings is available for every installation position, whether horizontal, vertical or lateral. This type of assembly prevents jamming and blockage on the guides resulting from discrepancies in parallelism. Floating bearings are created through a controlled extension of the clearance in the direction of the expected parallelism error. This creates an additional degree of freedom on one side.

During installation, take care that the floating bearing has approximately the same clearance on both sides. You can see the version of the fixed/floating bearing system recommended by us in the designs shown in the individual sections about the systems. The mounting surfaces of the guides and carriages should possess a good evenness (e.g. machined surface) to prevent twisting in the system. Smaller areas of mounting surface unevenness can be compensated to a certain extent by the floating bearing.

Eccentric forces

To ensure successful use of maintenance-free drylin® linear bearings, it is necessary to follow certain recommendations: if the distance between the driving force point and the fixed bearings is more than twice the bearing spacing (2:1 rule), a static friction value of 0.25 can theoretically result in jamming on the guides.

This principle applies regardless of the value of the load or drive force. The friction product is always related to the fixed bearings. The greater the distance between the drive and guide bearings, the higher the degree of wear and required drive force.

Failure to observe the 2:1 rule during a use of linear plain bearings can result in uneven motion or even system blockage. Such situations can often be remedied with relatively simple modifications.

If you have any questions on design and/or assembly, please make use of our technical support.

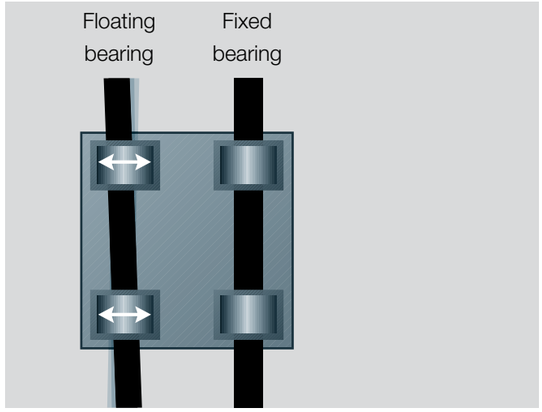


Figure 02: Automatic compensation of parallelism errors

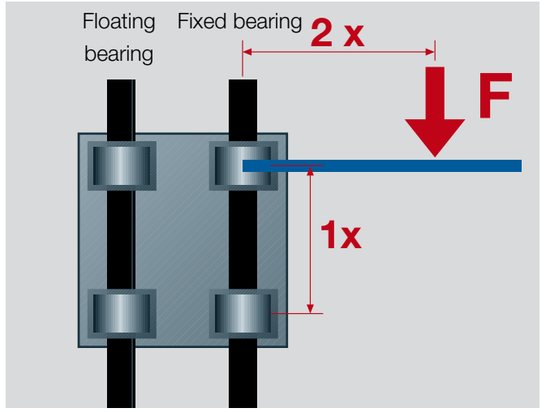


Figure 03: The 2:1 rule

Tightening torque for drylin® metallic screws

Metric thread (Da)	Tightening torque [Nm]	Recommended tightening torque [Nm]
M3	0.5–1.1	0.7
M4	1.0–2.8	1.5
M5	2.0–5.5	3.0
M6	4.0–10.0	6.0
M8	8.0–23.0	15.0
M10	22.0–46.0	30.0

Please be aware of the minimal screw-in depth for aluminium and zinc die-casting parts: 1.5 x Da

Cleanroom suitability and ESD compatibility of drylin®

drylin® linear guides from igus®

All drylin® guides are clearly qualified for cleanroom applications. The differentiation between the various cleanroom classes is only dependent on load and speed of the application. The combination of iglidur® J and hard-anodised aluminium is classified as level 1 in the ESD compatibility according to SEMI E78-0998 (highest rank).

Fraunhofer TESTED® DEVICE
IPA
igus Energieführungsketten/ Lineargleitführung
Report No. IG 0308-295

The following drylin® guides from igus® were tested: N40, W10, T25 and T30. See below for detailed results.

drylin® TK-10-30-01 linear guide system
"For the linear guide system drylin® TK-10-30-01 by igus® GmbH, it is possible, on the calculations of the likelihood of violation of threshold values of the detection sizes 0.2µm, 0.3µm, 0.5µm, and 5µm with motion speed of v = 0.1m/s, to clearly derive suitability for cleanrooms classified as ISO Class 3 according to DIN EN ISO 14644-1."

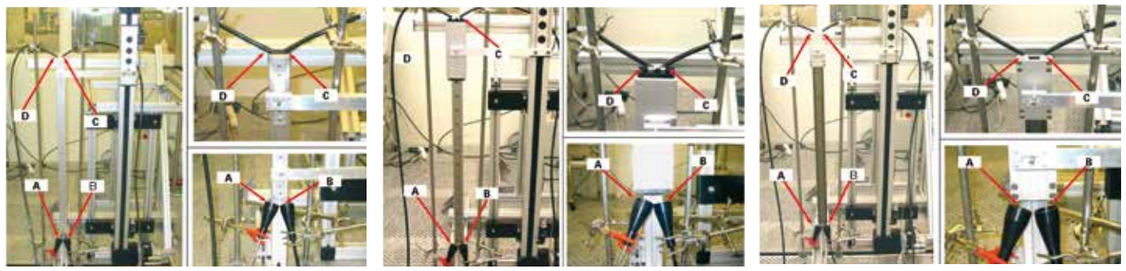
NK-02-40-02 drylin® linear guide system
"For the linear guide system drylin® NK-02-40-02 by igus® GmbH, it is possible, on the calculations of the likelihood of violation of threshold values of the detection sizes 0.2µm, 0.3µm, 0.5µm, and 5µm with motion speed of v =1m/s, to clearly derive suitability for cleanrooms classified as ISO Class 6 according to DIN EN ISO 14644-1."

The measurement results of the ESD compatibility according to SEMI E78-0998 show that the linear guide system drylin® NK-02- 40-02 can be classified as "level 1" (highest rank). See Fraunhofer IPA Report No.: IG 0308-295 73

TK-01-25-02 drylin® linear guide system
"For the linear guide system drylin® TK-01-25-02 by igus® GmbH, it is possible, on the calculations of the likelihood of violation of threshold values of the detection sizes 0.2µm, 0.3µm, 0.5µm, and 5µm with motion speed of v = 1m/s, to clearly derive suitability for cleanrooms classified as ISO Class 5 according to DIN EN ISO 14644-1."
The measurement results of the ESD compatibility according to SEMI E78-0998 show that the linear guide system drylin® TK-01-25-02 can be classified as "level 1" (highest rank).

WK-10-40-15-01 drylin® linear guide system
"For the linear guide system drylin® WK-10-40-15-01 by igus® GmbH, it is possible, on the calculations of the likelihood of violation of threshold values of the detection sizes 0.2µm, 0.3µm, 0.5µm, and 5µm with motion speed of v =1m/s, to clearly derive suitability for cleanrooms classified as ISO Class 6 according to DIN EN ISO 14644-1."
The measurement results of the ESD compatibility according to SEMI E78-0998 show that the linear guide system drylin® WK-10-40-15-01 can be classified as "level 1" (highest rank).

See Fraunhofer IPA Report No.: IG 0308-295 74



Expert for linear guides: System selection & service life calculation with CAD

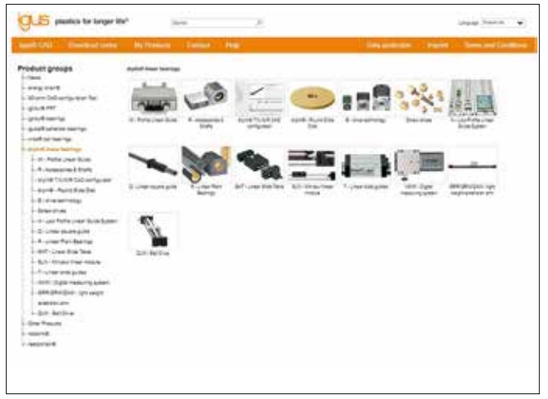
Configure linear bearings and calculate their service life – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.

▶ **www.igus.eu/drylin-expert**

Download the online tool app now

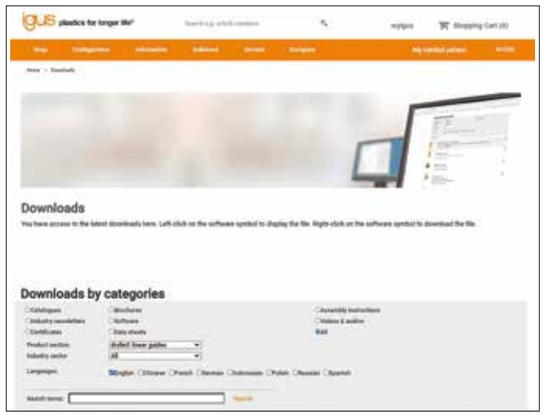
Download on the App Store



drylin® CAD configurator: Generate complete 3D models for drylin® linear technology according to your specifications

The igus® CAD online configurator gives you the ability to design and save your linear guide as a system, individual components directly as a 3D model in all commonly used formats, or to have these sent by e-mail – free of charge and without registration.

▶ **www.igus.eu/drylin-CAD**

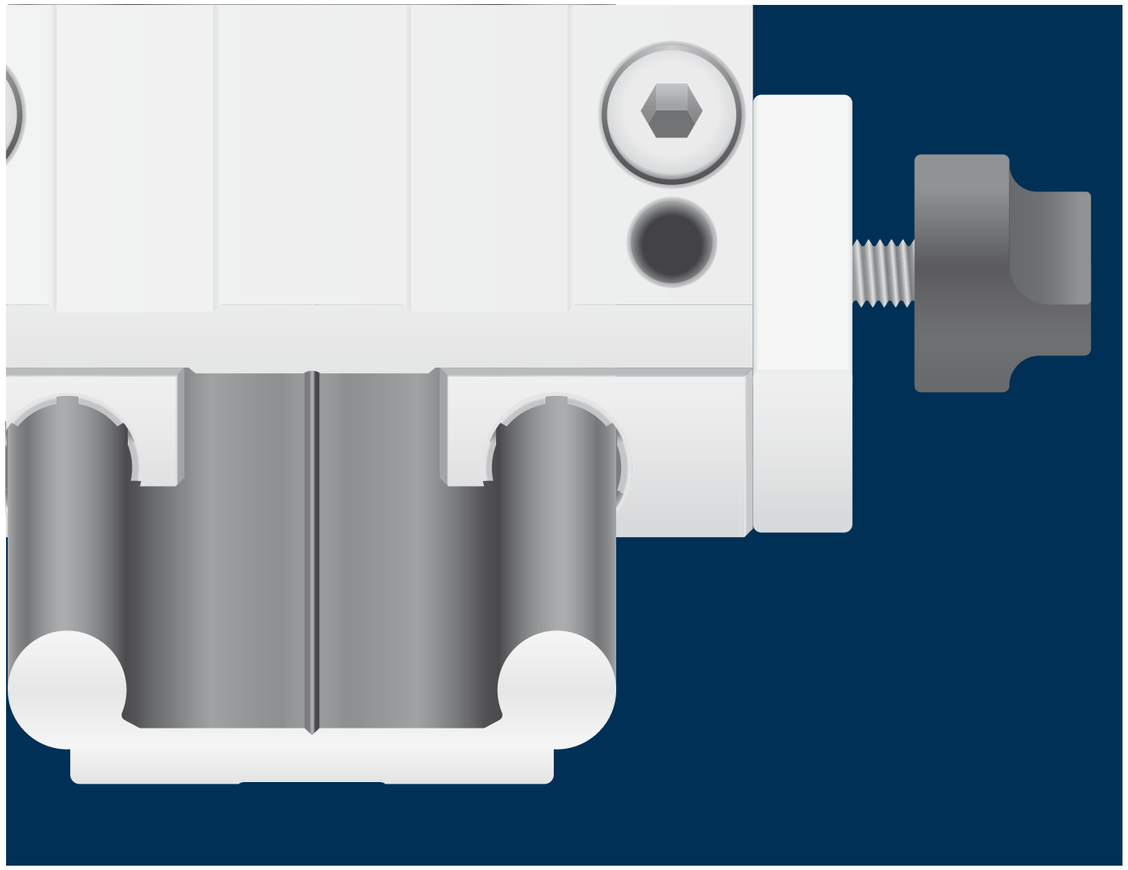


More information about the products can be found in the igus® download area

- Assembly instructions
- Assembly videos
- System design
- Catalogues

▶ **www.igus.eu/downloads**

My sketches

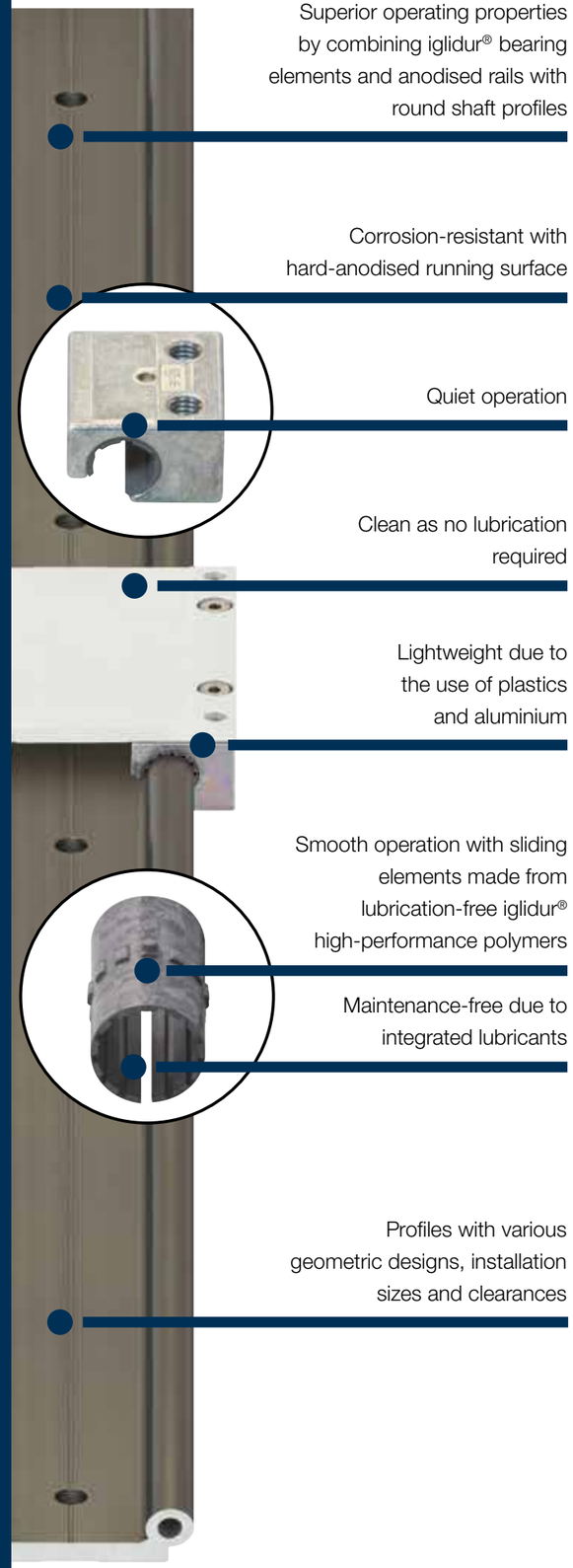


drylin® linear technology – drylin® W profile guides

- Modular linear guides
- Replaceable lubrication-free drylin® liners
- Robust linear housings
- Ready-to-install linear carriages
- Single and double rails

drylin® W profile guides | Advantages

Lubrication-free, light, quiet, long service life, cost-effective



Lubrication-free linear system – drylin® W

drylin® W profile guides are a cost-effective pre-assembled system. The design allows extremely high flexibility in the construction and installation due to the use of individual or double rails. Hard-anodised aluminium is used as rail material and provides the best friction and wear results. The absence of lubrication makes the profile guide system extremely insensitive to dirt and, due to its cleanliness, it is also suitable for applications in clean and hygienic environments.

- Easy installation, maintenance-free
- Resistant to dirt thanks to dry operation
- Lightweight and quiet
- Square rail with floating bearing function for 90° installation
- Bearing with manual clearance adjustment available

Typical application areas

- Agricultural machinery
- Automotive
- Medical technology
- Packaging industry
- Furniture

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +200°C
Min. –40°C

Carriage lengths: 60 – 250mm
Carriage widths: 54 – 195mm
Rail length: up to 4,000mm

Service life calculation
▶ www.igus.eu/drylin-expert

drylin® W profile guides | Products overview

Profile guides for almost unlimited design freedom

Individual components: Pillow blocks

- Material: Zinc die-casting, aluminium or stainless steel
- Round or square design
- Liners made from iglidur® high-performance polymers

▶ From page 977

Single components: Single and double rails

- Material: aluminium, hard-anodised
- Design freedom
- 316 stainless steel rails

▶ From page 976

Assembled systems: Complete carriages

- Pre-assembled
- Variable lengths and widths
- Mono-slide carriage made from aluminium

▶ From page 990

Accessories

- Manual clamp for single bearing housing and complete carriages
- End caps for high profile rails

▶ From page 1020

Hybrid guides

- Linear housing with integrated single or double roller
- Low drive force
- Available as single housing or complete carriage

▶ From page 1005

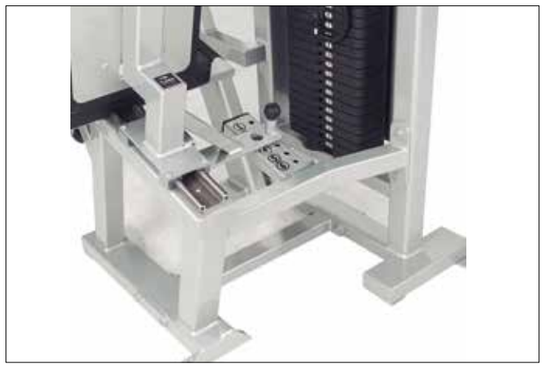
Based on drylin® W

Measuring systems
▶ From page 1187

Linear modules
SLW/SAW/GRW/ZLW
▶ From page 1338

drylin® linear bearings enable precise positioning at high speeds. Unlike conventional bearings, they do not require lubrication and are corrosion free.

Lightweight due to the use of plastic and aluminium with a corrosion-free coating, the guides in the drylin® range impress with their quiet and precise running.



Adjustment mechanisms on gym equipment no longer have to be maintained thanks to the igus® drylin® W profile guides.

The closing mechanism on this casting machine is subjected to high temperatures and dirt. To make it as durable as possible despite this, it is mounted with a drylin® W profile guide.

Due to the price advantage coupled with the resistance against dirt and dust, the customer opted for drylin® W.

Quiet, low vibration adjustments in the stage equipment field are enabled through the use of drylin® W linear guides based on steel shafts in combination with stainless steel pillow blocks.

Expert for linear guides: System selection and service life calculation with CAD

Configure and calculate the service life of linear bearings – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.

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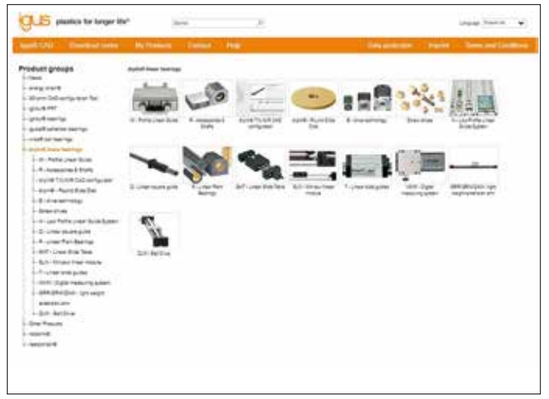

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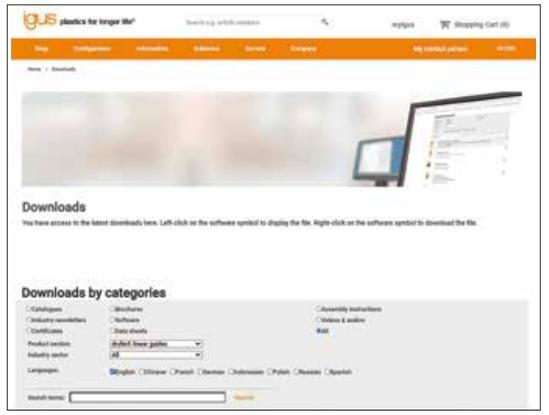

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- Catalogues

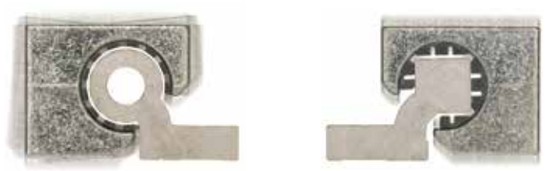
▶ **www.igus.eu/downloads**

drylin® liners made from high-performance polymers

Extremely wear-resistant tribopolymers improved by precisely blended additions of strengthening materials and solid lubricants, tested a thousand times and proved a million times – that is iglidur®. Further to the general properties, every iglidur® bearing material has a series of special features, which account for its particular suitability for certain applications and requirements. The detailed description of the materials can be found in the respective sections.

- Lubrication-free
- Corrosion-free
- Low coefficient of friction
- Maintenance-free
- Dirt resistance
- Lightweight
- High wear resistance
- Excellent price-performance ratio

	 The all-rounder – iglidur® J	 The specialist – iglidur® J200	 The extreme – iglidur® X	 The endurance runner – iglidur® E7	 The FDA-compliant – iglidur® A180	 Blue Sky Thinking FDA/EU-compliant iglidur® A160
Application temperature	from –50°C to +90°C	from –50°C to +90°C	from –100°C to +250°C	from –50°C to +70°C	from –50°C to +90°C	from –50°C to +90°C
Best coefficient of friction with	Steel shaft	Hard-anodised aluminium	Hard-chromed steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Volume resistance	> 10^{13}Ωcm	> 10^{8}Ωcm	< 10^{5}Ωcm	> 10^{9}Ωcm	> 10^{12}Ωcm	> 10^{12}Ωcm
Moisture absorption	1.3% weight	0.7% weight	0.5% weight	< 0.1% weight	0.2% weight	< 0.1% weight
Maximum service life with	Hard-anodised aluminium	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Potential counter partner	All shaft materials	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	All shaft materials	Stainless steel
Permissible stat. surface pressure	35MPa	23MPa	150MPa	18MPa	28MPa	15MPa
Part No.	JUM-...	J200UM-...	XUM-...	E7UM-...	A180UM-...	A160UM-...



Floating bearings for all directions (up to ±1mm) compensate misalignments and parallelism errors.

Floating bearings aid assembly – when using single rails

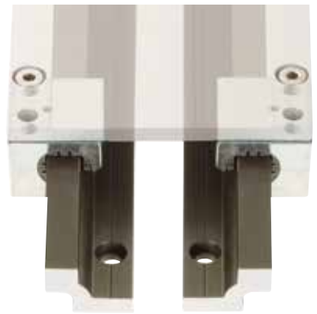
Assembly is easy with the drylin® WQ square profile. Floating bearings for all directions (±1mm) compensate misalignments and parallelism errors between rails. This eliminates jamming, otherwise only prevented by time-consuming manual alignment of the system. Although drylin® W is a profile rail system, it is able to compensate angular errors about the x-axis. An angular adjustment of ±7° is possible here. This effectively eliminates the misalignment known to occur when assembling to sheet metal fabrications.

Possible combinations in assembled rail systems

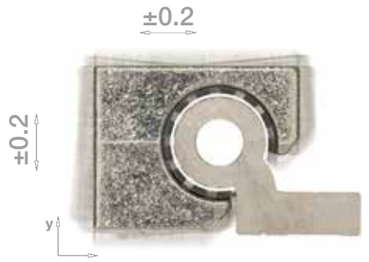
Fixed bearing **Floating bearing**

Fixed bearing **Floating bearing**

Fixed bearing **Floating bearing**



Available floating bearing blocks



LL – round

LLY – square

LLZ – square

rotating – square

drylin® W profile guides | Product selection

Profiles	Installation size 06	10	16	20	25	Liner material J	J200	X	A180	E7	A160
Single rail, round		●	●	●	●	●	○	●	●	●	●
Single rail, square	●	●	●	●	●		○				
Double rail, round		●	●	●	●	●	○	●	●	●	●
Double rail, square	●	●	●	●			○				
High profile, round		●	●			●	○	●	●	●	●
High profile, square	●						○				
Stainless steel		●	●	●	●	○	●	●	●	●	●
Carbon fibre/fibreglass	●										
Curved rail	●	●									
Bearing housing – material											
Zinc die-cast	●	●	●	●	●	●	○	●	●	●	●
Aluminium	●	●	●	●	●	●	○	●	●	●	●
Stainless steel		●	●	●	●	○	●	●	●	●	●
Bearing housing – options											
With manual clamp	●	●	●	●	●	○	○	●	●	●	●
Clearance adjustment		●	●	●		○	○				
Hybrid roller bearing		●	●	●	●	○					
Pre-load		●	●	●							
Bearing can be changed on the rail		●					○				
Linear guides											
Pre-assembled carriages	●	●	●	●	●	●	○	●	●	●	●
Hybrid carriages		●	●	●		○					
Mono-slide carriage	●	●	●	●		○					
Systems											
Lead screw modules	●	●	●	●	●	○	●	●	●	●	●
Toothed belt axis	●	●	●	●			○				
With measuring system		●				○					

● Standard
● Optional

drylin® W profile guides | Liners

Available pillow blocks and carriages	Suitable liners: iglidur® J200	iglidur® J	iglidur® X	iglidur® E7	iglidur® A180	iglidur® A160
Pillow block, square						
 Standard	○					
 Aluminium	○					
Pillow block, round						
 Standard	○	●	●	●	●	●
 Stainless steel	●	○	●	●	●	●
 Aluminium	○	●	●	●	●	●
 Aluminium, tandem	○	●	●	●	●	●
 "Turn-to-fit"	○	●				
 Spring pre-load	○					
 Bearing can be changed on the rail	○					
 Hybrid – roll and slide		○				
Guide carriage, fitted						
 Standard, assembled, square	○					
 Standard, assembled, round	○	○	●	●	●	●
 Hybrid, round		○				
 "Turn-to-fit", round		○				
Complete carriages						
 Mono-slide, square		○				

● Standard ● Optional

drylin® W profile guides | Product range

Single rail, square, hard-anodised aluminium

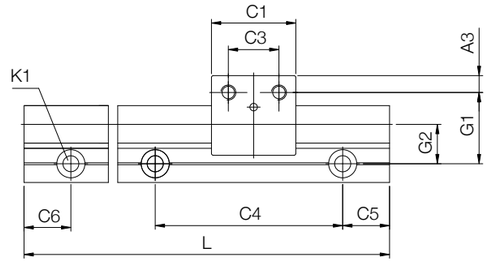

WSQ-06

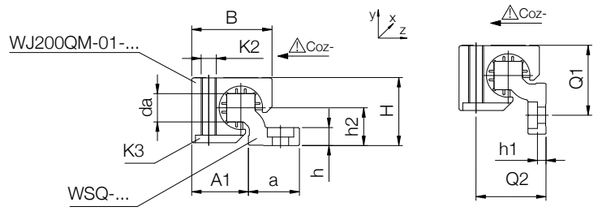

WSQ-10


WSQ-16


WSQ-20


WSQ-25





Hard-anodised surfaces
▶ Page 958

Curved rail profiles
▶ Page 962

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	L	a	h	h1	h2	G1	G2	A1	Q1	Q2
	[kg/m]	±0.25	–0.1	Max.									
WSQ-06	0.23	14	5	3,000	14	4	4[58]	7.5	18	10.5	13.5	17	15
WSQ-10	0.54	20	7.5	4,000	25	5.5	5.5[58]	11	27	17	18.5	26	21
WSQ-16	0.94	27	11.5	4,000	27	7.5	3.5	14	33	19	25	32	28
WSQ-20	1.41	36	15	4,000	27	9.5	4.5	20	38	21	30	37	37
WSQ-25	1.94	45	18.5	4,000	32	11.5	5.5	25	46.5	25.5	37.5	45.5	46

Part No.	C4	C5	C5	C6	C6	K1 for screw	Geometrical moment of inertia		Moment of resistance	
		Min.	Max.	Min.	Max.		Iy	Iz	Wby	Wbz
						DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WSQ-06	60	20	49.5	20	49.5	M4[58]	2,200	640	220	100
WSQ-10	120	20	79.5	20	79.5	M6[58]	16,100	3,300	950	350
WSQ-16	120	20	79.5	20	79.5	M8	33,000	10,800	1,700	910
WSQ-20	120	20	79.5	20	79.5	M8	56,500	34,000	2,600	2,100
WSQ-25	150	25	99.5	25	99.5	M10	115,900	73,500	4,500	3,700

Standard hole pattern: C5 = C6, please order with drawing for C5 ≠ C6

[57] Height dimension minus the bearing clearance tolerance

[58] Plain holes

Can be combined with:


WJ200QM-...

drylin® W profile guides | Product range

Pillow blocks, square, made from zinc die-casting or aluminium

Can be combined with:


WSQ-...

WSQ-...


WSX-...

Suitable mounting plate
▶ Page 1026

Technical data and dimensions [mm]

Part No.	Floating bearing clearance	Floating bearing direction	Weight		B	C1	C3	A3	K2	K3 for countersunk head screw	Static load capacity Coy	Coz+	Coz–
			[g]	-AL							[N]	[N]	[N]
WJ200QM-01-06	–	–	16	7.18	18	19	10	4.5	M4	M3	420	420	140
WJ200QM-01-06-AL	–	–	16	7.18	18	19	10	4.5	M4	M3	420	420	140
WJ200QM-01-06-LLY	± 0.5	y / z	16	7.18	18	19	10	4.5	M4	M3	420	420	140
WJ200QM-01-06-LLZ	± 0.5	y / z	16	7.18	18	19	10	4.5	M4	M3	420	420	140
WJ200QM-01-10	–	–	41	21	26	29	16	6.5	M6	M5	1,200	1,200	250
WJ200QM-01-10-AL	–	–	41	21	26	29	16	6.5	M6	M5	1,200	1,200	250
WJ200QM-01-10-LLY	± 0.7	y / z	41	21	26	29	16	6.5	M6	M5	1,200	1,200	250
WJ200QM-01-10-LLZ	± 0.7	y / z	41	21	26	29	16	6.5	M6	M5	1,200	1,200	250
WJ200QM-01-16	–	–	100	51	34.5	36	18	9	M8	M6	2,100	2,100	400
WJ200QM-01-16-AL	–	–	100	51	34.5	36	18	9	M8	M6	2,100	2,100	400
WJ200QM-01-16-LLY	± 1.0	y / z	100	51	34.5	36	18	9	M8	M6	2,100	2,100	400
WJ200QM-01-16-LLZ	± 1.0	y / z	100	51	34.5	36	18	9	M8	M6	2,100	2,100	400
WJ200QM-01-20	–	–	190	104	42.5	45	27	9	M8	M6	3,200	3,200	500
WJ200QM-01-20-AL	–	–	190	104	42.5	45	27	9	M8	M6	3,200	3,200	500
WJ200QM-01-20-LLY	± 1.0	y / z	190	104	42.5	45	27	9	M8	M6	3,200	3,200	500
WJ200QM-01-20-LLZ	± 1.0	y / z	190	104	42.5	45	27	9	M8	M6	3,200	3,200	500
WJ200QM-01-25	–	–	435	212	52.5	58	36	11	M10	M8	4,800	4,800	950
WJ200QM-01-25-AL	–	–	435	212	52.5	58	36	11	M10	M8	4,800	4,800	950
WJ200QM-01-25-LLY	± 1.0	y / z	435	212	52.5	58	36	11	M10	M8	4,800	4,800	950
WJ200QM-01-25-LLZ	± 1.0	y / z	435	212	52.5	58	36	11	M10	M8	4,800	4,800	950

Order example: **WJ200QM-01-06**: Pillow block, square
WJ200QM-01-06-LLZ: Pillow block, square, with floating bearing in z-direction
WJ200QM-01-06-AL: Pillow block, square, made from aluminium

Order key – single rail

Type	Length
WS Q - 06 - □	

- WS: Guide rail
- Q: Square
- 06: Shafts Ø
- □: Rail length [mm]

Order key – pillow block

Type	Size
WJ200QM-01-10	

- WJ200QM: drylin® W
- 01: Liner material iglidur® J200
- 10: Pillow block, square
- Standard
- Size

Options:
- **Blank:** Fixed bearing
- **LLY:** Floating bearing in y-direction
- **LLZ:** Floating bearing in z-direction
- **AL:** Pillow block made from aluminium

drylin® W profile guides | Product range

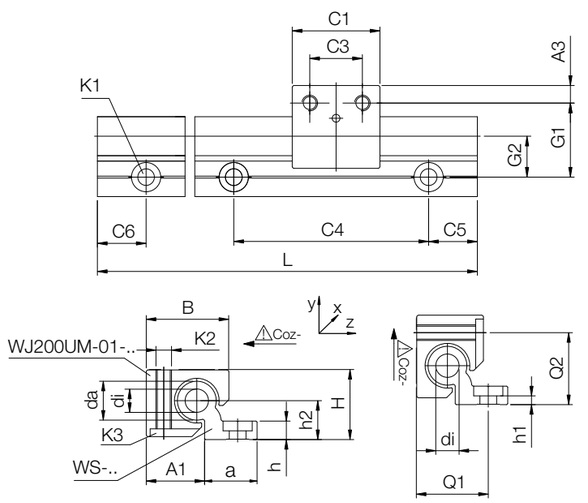
Single rail, round, hard-anodised aluminium

WS-10

WS-16

WS-20

WS-25



This assembled position not possible for WS-10

Hard-anodised surfaces
▶ Page 958

Curved rail profiles
▶ Page 962

Stainless steel version available
▶ Page 1210

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	di	L	a	h	h1	h2	G1	G2	A1	Q1	Q2
	[kg/m]	±0.25	–0.1		Max.									
WS-10	0.62	18	10	–	4,000	27	5.5	5.5[58]	9	27	17	16.5	–	–
WS-16	0.98	27	16	8.0	4,000	27	7.5	3.5	14	33	19	25	32	28
WS-20	1.32	36	20	10.2	4,000	27	9.5	4.5	20	38	21	30	37	37
WS-25	2.03	45	25	14	4,000	32	11.5	5.5	25	46.5	25.5	37.5	45.5	46

Part No.	C1	C3	C4	C5	C5	C6	C6	A3	K1 for screw	Geometrical moment of inertia		Moment of resistance	
				Min.	Max.	Min.	Max.			ly	lz	Wby	Wbz
									DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WS-10	29	16	120	20	79.5	20	79.5	6.5	M6[58]	19,000	2,850	1,000	310
WS-16	36	18	120	20	79.5	20	79.5	9	M8	36,000	12,900	1,800	940
WS-20	45	27	120	20	79.5	20	79.5	9	M8	57,100	35,000	2,700	1,900
WS-25	58	36	150	25	99.5	25	99.5	11	M10	129,000	86,000	4,900	3,800

Standard hole pattern: C5 = C6, please order with drawing for C5 ≠ C6

[57] Height dimension minus the bearing clearance tolerance

[58] Plain holes

Can be combined with:

WJ200UM(T)-...

WJ200UME-...

WJUM-..-ES-FG

WJRM-...

drylin® W profile guides | Product range

Single rails round, made of 316 stainless steel

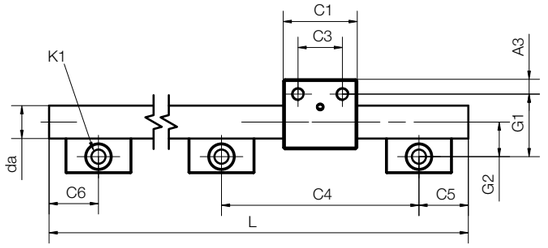
STAIN-LESS STEEL

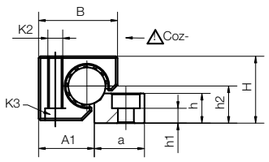
Order key – single rail

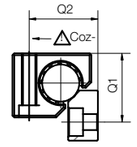
Type	Material
WS-10-ES-FG	

Guide rail | Shafts Ø | Stainless steel | Precision casting

Housing and shaft support material	AISI 316
Shaft material	AISI 316Ti
Installation size 25 Shaft, shaft support and housing material	AISI 316Ti







This assembled position is not possible for WS-10

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	L	a	h	h1	h2	G1	G2	A1	Q1	Q2
	[kg/m]	±0.25	–0.1	Max.	–0.3								
WS-10-ES-FG	0.87	18	10	3,000	27	5.5	5.5[58]	9	27	17	16.5	–	–
WS-16-ES-FG	2.22	27	16	3,000	27	12.0	4.5	14	33	19	25	32	28
WS-20-ES-FG	3.37	36	20	3,000	27	16.0	8.0	20	38	21	30	37	37
WS-25-ES-FG	5.21	45	25	3,000	32	20.0	9.0	25	46.5	25.5	37.5	45.5	46

Part No.	C1	C3	C4	C5	C5	C6	C6	A3	K1 for screw	Geometrical moment of inertia		Moment of resistance	
				Min.	Max.	Min.	Max.			ly	lz	Wby	Wbz
									DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WS-10-ES-FG	29	16	120	20	79.5	20	79.5	6.5	M6[58]	491	491	98	98
WS-16-ES-FG	36	18	120	20	79.5	20	79.5	9.0	M8	3,217	3,217	402	402
WS-20-ES-FG	45	27	120	20	79.5	20	79.5	9.0	M8	7,854	7,854	785	785
WS-25-ES-FG	58	36	150	25	99.5	25	99.5	11.0	M10	19,175	19,175	1,534	1,534

[57] Height dimension minus the bearing clearance tolerance

[58] Plain holes

Can be combined with:

WJ200UM(T)-...

WJ200UME-...

WJUM-..-ES-FG

WJRM-...

Suitable liner material:

iglidur® J

iglidur® E7

iglidur® A180

drylin® W profile guides | Product range

Pillow blocks, round, made from zinc die-casting or aluminium

Order example:
WJ200UM-01-10:
Pillow block, round
WJ200UM-01-10-LL:
Pillow block, round, floating bearing
WJ200UM-01-10-AL:
Pillow block, round, made from aluminium

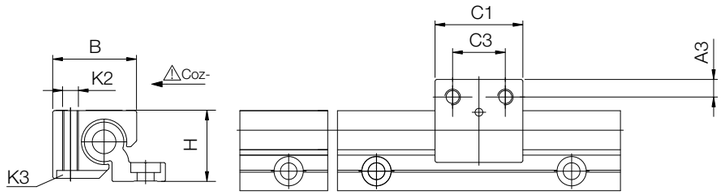
Suitable mounting plate
▶ Page 1026

Order key

Type	Size	Options
WJ200UM-01-	10	-AL

drylin® W	Liner material iglidur® J200	Pillow block, round	Standard	Size	Aluminium

Options:
Blank: Fixed bearing
LL: Floating bearing
AL: Pillow block made from aluminium
ES: Stainless steel
ES-FG: Stainless steel precision casting



Technical data and dimensions [mm]

Part No.	Floating bearing clearance	Weight [g]	B	C1	C3	A3	K2	K3 for countersunk head screw	Static load capacity Coy [N]	Coz+ [N]	Coz– [N]
WJ200UM-01-10	–	41	26.0	29	16	6.5	M6	M5	1,200	1,200	250
WJ200UM-01-10-LL	±0.2	41	26.0	29	16	6.5	M6	M5	1,200	1,200	250
WJ200UM-01-10-AL	–	20	26.0	29	16	6.5	M6	M5	1,200	1,200	250
WJUM-01-10-ES-FG[59]	–	57	26.0	29	16	6.5	M6	M5	3,800	3,800	950
WJ200UM-01-16	–	100	34.5	36	18	9.0	M8	M6	2,100	2,100	400
WJ200UM-01-16-LL	±0.2	100	34.5	36	18	9.0	M8	M6	2,100	2,100	400
WJ200UM-01-16-AL	–	48	34.5	36	18	9.0	M8	M6	2,100	2,100	400
WJUM-01-16-ES-FG[59]	–	134	34.5	36	18	9.0	M8	M6	6,900	6,900	1,450
WJ200UM-01-20	–	190	42.5	45	27	9.0	M8	M6	3,200	3,200	500
WJ200UM-01-20-LL	±0.25	190	42.5	45	27	9.0	M8	M6	3,200	3,200	500
WJ200UM-01-20-AL	–	99	42.5	45	27	9.0	M8	M6	3,200	3,200	500
WJUM-01-20-ES-FG[59]	–	280	42.5	45	27	9.0	M8	M6	11,000	11,000	1,900
WJ200UM-01-25	–	425	52.5	58	36	11.0	M10	M8	4,800	4,800	950
WJ200UM-01-25-LL	±0.25	425	52.5	58	36	11.0	M10	M8	4,800	4,800	950
WJ200UM-01-25-AL	–	250	52.5	58	36	11.0	M10	M8	4,800	4,800	950
WJUM-01-25-ES-FG[59]	–	564	52.5	58	36	11.0	M10	M8	16,000	16,000	3,600

[59] Alternative with XUMO-01-... liners for high temperatures available. Part No.: WXUM-01-...

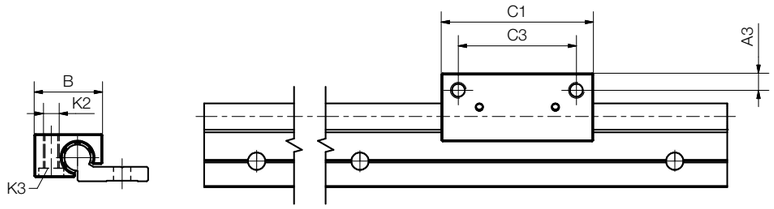
drylin® W profile guides | Product range

Pillow blocks, tandem, round, anodised aluminium

Order key

Type	Size	Material
WJ200UM T-01-	10	-AL

drylin® W	Liner material iglidur® J200	Pillow block, round	Tandem	Standard	Size	Aluminium



Technical data and dimensions [mm]

Part No.	Weight [g]	B	C1	C3	A3	K2	K3 for countersunk head screw	Static load capacity Coy [N]	Coz+ [N]	Coz– [N]
WJ200UMT-01-10-AL	43	26	58	45	6.5	M6	M5	2,000	2,000	420
WJ200UMT-01-16-AL	102	34.5	72	54	9	M8	M6	3,400	3,400	670
WJ200UMT-01-20-AL	182	42.5	80	62	9	M8	M6	5,300	5,300	830

Can be combined with:

WS-... | WS-..-ES-FG-... | WS-... | WS-...-ES-FG | WSX-...

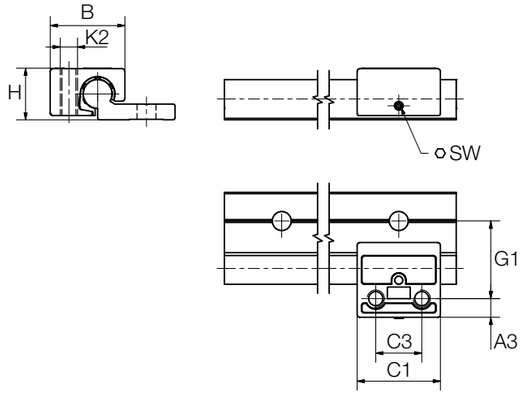
Suitable liner material:

iglidur® J | iglidur® J200 | iglidur® X | iglidur® E7 | iglidur® A180

drylin® W profile guides | Product range

Pillow blocks, round, adjustable bearing clearance

Turn-to-fit



Order key

Type	Size
WJ200UM E -01-10	

drylin® W	Liner material iglidur® J200	Pillow block, round	Adjustable	Standard	Size

Allen key supplied

Suitable mounting plate
▶ Page 1026

Technical data and dimensions [mm]

Part No.	Weight	B	C1	C3	A3	K2	H	SW	G1	Static load capacity Coy	Coz+	Coz–
	[g]						±0.25			[N]	[N]	[N]
WJUME-01-10	43	26	29	16	6.5	M6	18	1.5	27	560	560	250
WXUME-01-10	43	26	29	16	6.5	M6	18	1.5	27	560	560	250
WJUME-01-10-AL	19	26	29	16	6.5	M6	18	1.5	27	560	560	250
WJUME-01-10-ES	56	26	29	16	6.5	M6	18	1.5	27	560	560	250
WJ200UME-01-10	110	34.5	36	18	9	M8	27	2.5	33	560	560	250
WJ200UME-01-16	110	34.5	36	18	9	M8	27	2.5	33	980	980	400
WJ200UME-01-16-AL	45	34.5	36	18	9	M8	27	2.5	33	980	980	400
WJ200UME-01-16-ES	132	34.5	36	18	9	M8	27	2.5	33	980	980	400
WJ200UME-01-20	222	42.5	45	27	9	M8	36	2.5	38	1,500	1,500	500
WJ200UME-01-20-AL	95	42.5	45	27	9	M8	36	2.5	38	1,500	1,500	500
WJ200UME-01-20-ES	275	42.5	45	27	9	M8	36	2.5	38	1,500	1,500	500
WJ200UME-01-25	431	52.5	58	36	11	M10	45	2.5	46.5	2,250	2,250	950
WJ200UME-01-25-AL	194	52.5	58	36	11	M10	45	2.5	46.5	2,250	2,250	950
WJ200UME-01-25-ES	539	52.5	58	36	11	M10	45	2.5	46.5	2,250	2,250	950

Can be combined with:

WS-... WS-..-ES-FG-... WS-... WS-...-ES-FG WSX-...

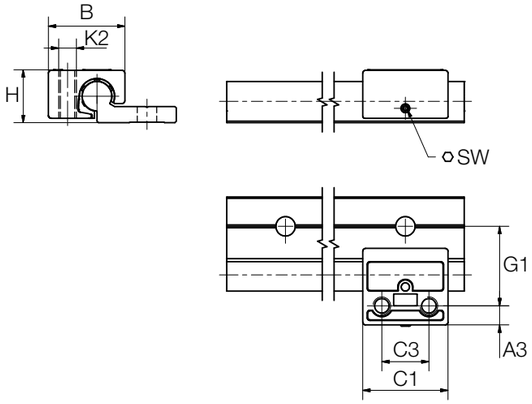
Suitable liner material:

iglidur® J iglidur® J200

drylin® W profile guides

drylin® W profile guides | Product range

Pillow blocks, round, with spring pre-load



Order key

Type	Size	Material
WJ200UM-01-16-□-P40		

drylin® W	Liner material iglidur® J200	Pillow block, round	Standard	Size	Housing material	Pre-load

Options:
Blank: Zinc die-casting (Zn)
AL: Aluminium
ES: Stainless steel (AISI 316Ti, machined)

Suitable mounting plate
▶ Page 1026

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

Technical data and dimensions [mm]

Part No.	Spring colour	Pre-load	Weight (Zn)	Weight -ES	Weight -AL	B	C1	C3	A3	K2	H	SW	G1
		[N]	[g]	[g]	[g]						±0.25		
WJ200UM-01-10-□-P40	blue	4	43	56	19	26	29	16	6.5	M6	18	1.5	27
WJ200UM-01-10-□-P90	yellow	9	43	56	19	26	29	16	6.5	M6	18	1.5	27
WJ200UM-01-10-□-P140	red	14	43	56	19	26	29	16	6.5	M6	18	1.5	27
WJ200UM-01-16-□-P40	blue	4	110	132	46	34.5	36	18	9	M8	27	2.5	33
WJ200UM-01-16-□-P90	yellow	9	110	132	46	34.5	36	18	9	M8	27	2.5	33
WJ200UM-01-16-□-P140	red	14	110	132	46	34.5	36	18	9	M8	27	2.5	33
WJ200UM-01-16-□-P230	green	23	110	132	46	34.5	36	18	9	M8	27	2.5	33
WJ200UM-01-20-□-P40	blue	4	222	275	95	42.5	45	27	9	M8	36	2.5	38
WJ200UM-01-20-□-P90	yellow	9	222	275	95	42.5	45	27	9	M8	36	2.5	38
WJ200UM-01-20-□-P140	red	14	222	275	95	42.5	45	27	9	M8	36	2.5	38
WJ200UM-01-20-□-P230	green	23	222	275	95	42.5	45	27	9	M8	36	2.5	38

Can be combined with:

WS-... WS-..-ES-FG-... WS-... WS-...-ES-FG WSX-...

Suitable liner material:

iglidur® J iglidur® J200

drylin® W profile guides | Product range

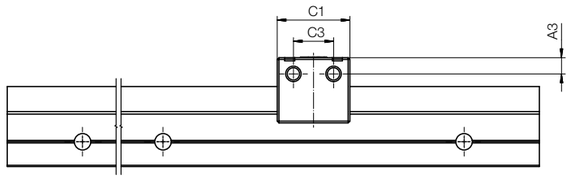
Pillow blocks, round; change the liner without disassembly

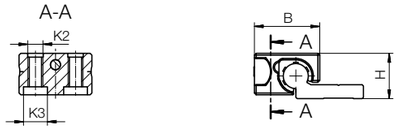
Order key

Type	Size

WJ200UM A - 01 - 10 - AL

- drylin® W
- Liner material iglidur® J200
- Pillow block, round
- Replaceable
- Standard
- Size
- Aluminium





Technical data and dimensions [mm]

Part No.	Weight	B	C1	C3	A3	K2	K3[150)]	H	Static load capacity		
									Coy	Coz+	Coz–
	[g]							±0.25	[N]	[N]	[N]
WJ200UMA-01-10-AL	18	26.0	29	16	6.5	M6	M5	18	1,000	1,000	200
WJ200UMA-01-16-AL New	44	34.5	36	18	9.0	M8	M6	27	1,250	1,250	275
WJ200UMA-01-20-AL New	91	42.5	45	27	9.0	M8	M6	36	1,500	1,500	350

[150)] Counterbore for socket cap bolt

Suitable mounting plate
▶ Page 1026

More installation can be found online
▶ www.igus.eu/replacement-bearing-installation

Can be combined with:


WS-...

WS-..-ES-FG-...

WS-...

WS-...-ES-FG


WSX-...

Suitable liner material/accessories


iglidur® J200


Assembling aid


Liners

drylin® W profile guides | Application examples

drylin® W pillow blocks for longer and more reliable operating times

Application in delta robots
Pillow block with interchangeable WJ200UMA liner for drylin® delta robots ▶ **Page 1447.**

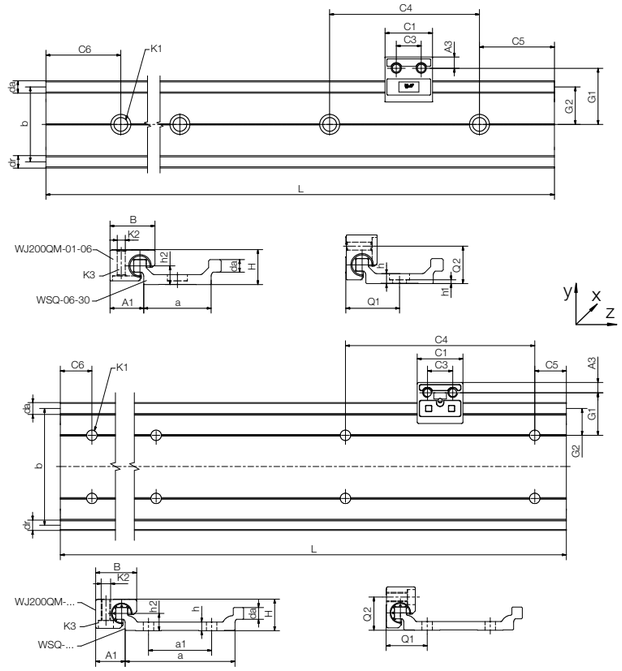
Quick bearing replacement directly on the rail

For 24/7 operation. Simple replacement without disassembly, with assembly tool. All existing drylin® W systems can be retrofitted

Installation guide online
▶ **www.igus.eu/WJUMA**

drylin® W profile guides | Product range

Double rails, square, hard-anodised aluminium



Hard-anodised surfaces
▶ Page 958

Curved rail profiles
▶ Page 962

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	dr	L	a	A1	b	h	h1	h2	G1	G2	a1[61]	Q1	Q2
	[kg/m]	±0.25	–0.1		Max.											
WSQ-06-30	0.45	14	5	5	3,000	27–0.4	13.5	30	4	4[58]	7.5	22.5	15	–	21.5	15
WSQ-06-60	0.70	14	5	5	3,000	58–0.4	13.5	61	4	4[58]	7.0	42.5	30.5	40	17	15
WSQ-10-40	0.92	20	75	6.7	4,000	36–0.5	18.5	40	5.5	5.5[58]	11	30	20	–	29	21
WSQ-10-80	1.41	20	7.5	6.7	4,000	70–0.7	18.5	74	5.5	5.5[58]	11	27	17	40	26	21
WSQ-10-120	2.02	20	7.5	6.7	4,000	116–0.7	18.5	120	5.5	5.5[58]	11	30	20	80	29	21
WSQ-16-60	1.84	27	11.5	10.7	4,000	54–0.5	35.5	58	7.5	3.5	14	43	29	–	42	28
WSQ-20-80	3.30	36	15	14.1	4,000	74–0.7	30.0	82	9.5	4.5	20	38	21	40	37	37

Part No.	C4	C5		C6		K1 for screw	Geometrical moment of inertia		Moment of resistance	
		Min.	Max.	Min.	Max.		ly	lz	Wby	Wbz
						DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WSQ-06-30	60	20	49.5	20	49.5	M5[58]	19,000	1,250	1,100	200
WSQ-06-60	60	20	49.5	20	49.5	M5[58]	117,900	1,600	3,500	290
WSQ-10-40	120	20	79.5	20	79.5	M6[58]	71,600	5,580	3,000	610
WSQ-10-80	120	20	79.5	20	79.5	M6[58]	335,000	7,070	8,300	700
WSQ-10-120	120	20	79.5	20	79.5	M6[58]	1,175,000	8,000	18,400	760
WSQ-16-60	120	20	79.5	20	79.5	M8	324,700	20,500	9,400	1,700
WSQ-20-80	120	20	79.5	20	79.5	M8	1,145,000	75,300	23,600	4,500

[57] Height dimension minus the bearing clearance tolerance [58] With plain holes
[61] WSQ-06-30/-10-40/-16-60 a single row of mounting holes down the centreline, WSQ-06-60/10-80/-10-120/-20-80 two parallel rows of mounting holes

Can be combined with:

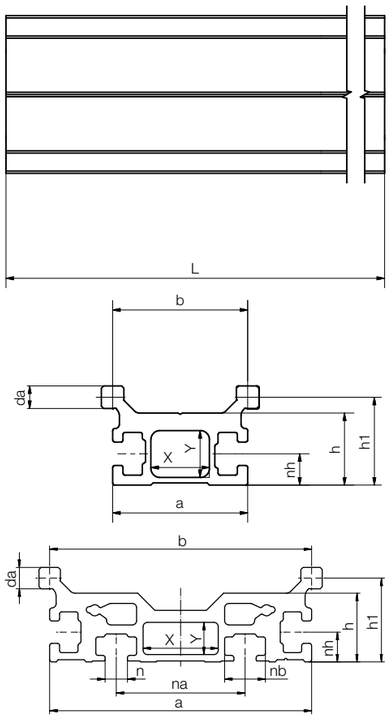

WJQM-...


WW-...

WWC-...

drylin® W profile guides | Product range

High profile rails, square, hard-anodised aluminium



Suitable end caps
▶ Page 1025

Order example:
WSX-06-30/06-60: High profile rail, square
WSQ-06-30: Standard double rail, square

Technical data and dimensions [mm]

Part No.	Weight	da	L	a	b	h	h1	nh	n	nb	na	X	Y	Geometrical moment of inertia		Moment of resistance	
														ly	lz	Wby	Wbz
	[kg/m]	–0.1	Max.											[mm⁴]	[mm⁴]	[mm³]	[mm³]
WSX-06-30	0.76	5	4,000	29.7	30	16	19.5	7	–	–	–	12	10	30,391	11,674	1,736	845
WSX-06-60	1.39	5	4,000	61	61	16	19.5	6.9	5.2	9.5	30	17.5	7.5	212,826	17,018	6,448	1,398

Order key

Type	Length
WS Q - 06 - 30	- 3000

Profile rail: Square
Shaft Ø: 06
Rail width [mm]: 30
Rail length [mm]: 3000

Order key

Type	Length
WS X - 06 - 30	- 4000

Profile rail: High profile rail
Shaft Ø: 06
Rail width [mm]: 30
Rail length [mm]: 4000

Can be combined with:


WJQM-...


WW-...

WWC-...

drylin® W profile guides | Product range

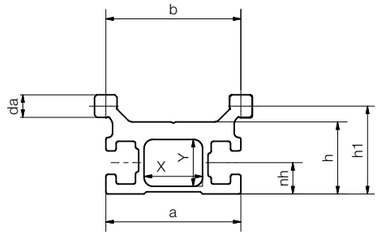
Linear guides – lightweight, non-metallic, strong and X-ray transparent

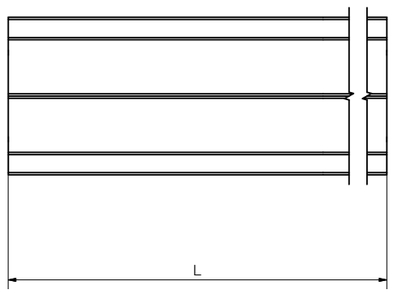
Order key

Type	Dimensions [mm]/Type

W S P C - 06 - 30 - 1000

drylin® W	Rail	Plastic	Carbon fibre	Shaft Ø	Rail width	Rail length





Technical data – guide rail

Part No.	F max. radial		Weight	Iy	Iz
	stat.	dyn.			
	[N]	[N]	[g/m]	[mm⁴]	[mm⁴]
WSPC-06-30	300	60	410	30,391	11,674

Dimensions [mm] – guide profile

Part No.	a	b	da –0.1	h	h1	nh	X	Y	L
WSPC-06-30	30	30	5	16	19.5	7	13	10	3,000

drylin® W profile guides | Product range

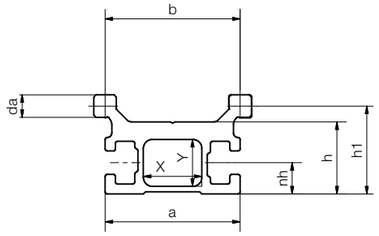
Linear guides – lightweight, non-metallic, strong and cost-effective

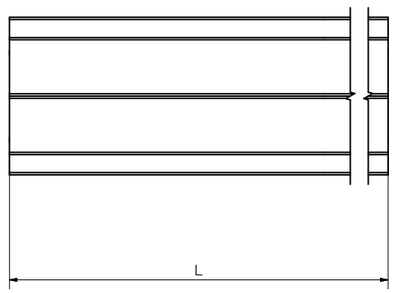
Order key

Type	Dimensions [mm]/Type

W S P G - 06 - 30 - 1000

drylin® W	Rail	Plastic	Fibreglass	Shaft Ø	Rail width	Rail length





Technical data – guide rail

Part No.	F max. radial		Weight	Iy	Iz
	stat.	dyn.			
	[N]	[N]	[g/m]	[mm⁴]	[mm⁴]
WSPG-063001	200	50	505	30,391	11,674

Dimensions [mm] – guide profile

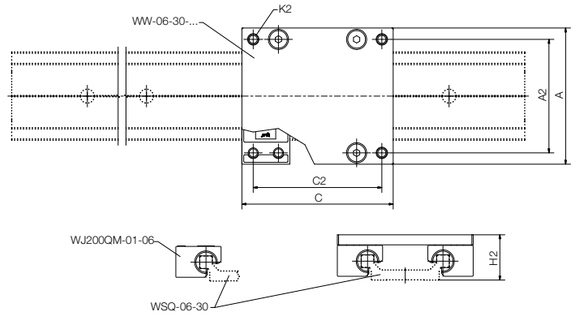
Part No.	a	b	da –0.1	h	h1	nh	X	Y	L
WSPG-063001	30	30	5	16	19.5	7	13	10	2,000

Dimensions [mm] – complete system

Part No.	H	A1	A	A2	C	C2
WSPG-063001	30	12	52	45	60	51

drylin® W profile guides | Product range

Guide carriages, assembled, square



Order key

Type	Size
WW Q	-06-30-06

Guide carriage	Square	Shafts-Ø [mm]	Profile width	Carriage length

Technical data and dimensions [mm]

Part No.[54]	Weight	A	C	A2	C2	K2	H2[57]	Static load capacity				
		Width	Length				±0.25	Coy	Coz	Mox	Moy	Moz
	[kg]							[N]	[N]	[Nm]	[Nm]	[Nm]
WWQ-06-30-06	0.10	54	60	45	51	M4	18	1,680	840	25	34	34
WWQ-06-30-08	0.11	54	80	45	71	M4	18	1,680	840	25	51	51
WWQ-06-30-10	0.12	54	100	45	91	M4	18	1,680	840	25	68	68
WWQ-06-60-06	0.13	85	60	76	51	M4	18	1,680	840	50	34	34
WWQ-06-60-08	0.15	85	80	76	71	M4	18	1,680	840	50	51	51
WWQ-06-60-10	0.17	85	100	76	91	M4	18	1,680	840	50	68	68
WWQ-10-40-10	0.29	73	100	60	87	M6	26	4,800	2,400	96	170	170
WWQ-10-40-15	0.34	73	150	60	137	M6	26	4,800	2,400	96	290	290
WWQ-10-40-20	0.40	73	200	60	187	M6	26	4,800	2,400	96	410	410
WWQ-10-80-10	0.34	107	100	94	87	M6	26	4,800	2,400	178	170	170
WWQ-10-80-15	0.42	107	150	94	137	M6	26	4,800	2,400	178	290	290
WWQ-10-80-20	0.50	107	200	94	187	M6	26	4,800	2,400	178	410	410
WWQ-10-120-10	0.41	153	100	140	87	M6	26	4,800	2,400	288	170	170
WWQ-10-120-15	0.54	153	150	140	137	M6	26	4,800	2,400	288	290	290
WWQ-10-120-20	0.66	153	200	140	187	M6	26	4,800	2,400	288	410	410
WWQ-16-60-10	0.71	104	100	86	82	M8	35	8,400	4,200	240	270	270
WWQ-16-60-15	0.84	104	150	86	132	M8	35	8,400	4,200	240	480	480
WWQ-16-60-20	0.97	104	200	86	182	M8	35	8,400	4,200	240	690	690
WWQ-20-80-15	1.20	134	150	116	132	M8	44	12,800	6,400	525	670	670
WWQ-20-80-20	1.30	134	200	116	182	M8	44	12,800	6,400	525	990	990
WWQ-20-80-25	1.50	134	250	116	232	M8	44	12,800	6,400	525	1,250	1,250

[57] Height dimension minus the bearing clearance tolerance [64] Optional with manual clamp, suffix "-HKA"

Can be combined with:

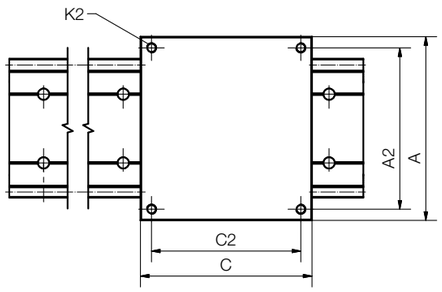
WSQ-... WSXQ-...

Suitable liner material:

iglidur® J200

drylin® W profile guides | Product range

Mono-slide carriages, anodised aluminium



Order key

Type	Size
WWC	-10-40-10

Mono-slide guide carriage	Shafts-Ø [mm]	Profile width	Carriage length

Technical data and dimensions [mm]

Part No.	Weight	A	C	A2	C2	K2	H2[57]	Static load capacity				
		Width	Length				±0.2	Coy	Coz	Mox	Moy	Moz
	[kg]							[N]	[N]	[Nm]	[Nm]	[Nm]
WWC-06-30-06	0.07	54	60	45	51	M4	16	1,680	840	25	34	34
WWC-06-30-08	0.09	54	80	45	71	M4	16	1,680	840	25	51	51
WWC-06-30-10	0.12	54	100	45	91	M4	16	1,680	840	25	68	68
WWC-10-40-10	0.21	73	100	60	87	M6	22	4,800	2,400	96	170	170
WWC-10-40-15	0.32	73	150	60	137	M6	22	4,800	2,400	96	290	290
WWC-10-40-20	0.42	73	200	60	187	M6	22	4,800	2,400	96	410	410
WWC-10-80-10	0.28	107	100	94	87	M6	22	4,800	2,400	178	170	170
WWC-10-80-15	0.42	107	150	94	137	M6	22	4,800	2,400	178	290	290
WWC-10-80-20	0.56	107	200	94	187	M6	22	4,800	2,400	178	410	410
WWC-10-120-10	0.36	153	100	140	87	M6	22	4,800	2,400	288	170	170
WWC-10-120-15	0.54	153	150	140	137	M6	22	4,800	2,400	288	290	290
WWC-10-120-20	0.72	153	200	140	187	M6	22	4,800	2,400	288	410	410
WWC-16-60-10	0.41	104	100	86	82	M8	30	8,400	4,200	240	270	270
WWC-16-60-15	0.61	104	150	86	132	M8	30	8,400	4,200	240	480	480
WWC-16-60-20	0.80	104	200	86	182	M8	30	8,400	4,200	240	690	690
WWC-20-80-15	0.99	134	150	116	132	M8	40	12,800	6,400	525	670	670
WWC-20-80-20	1.33	134	200	116	182	M8	40	12,800	6,400	525	990	990
WWC-20-80-25	1.66	134	250	116	232	M8	40	12,800	6,400	525	1,250	1,250

[57] Height dimension minus the bearing clearance tolerance

Can be combined with:

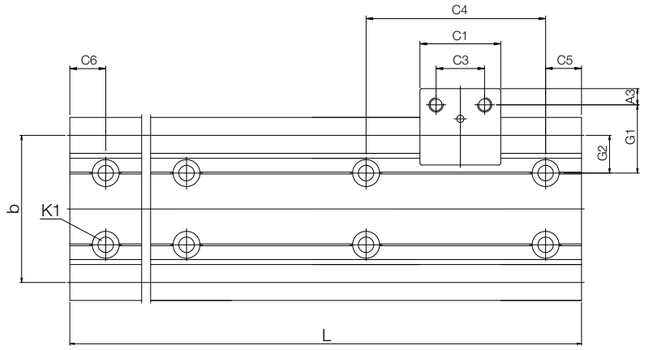
WSQ-... WSXQ-...

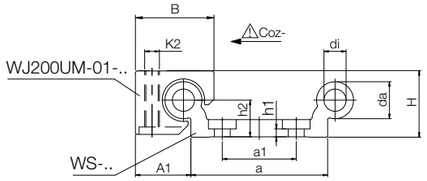
Suitable liner material:

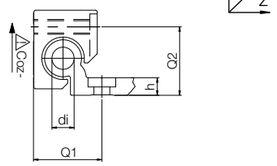
iglidur® J

drylin® W profile guides | Product range

Double rails, round, hard-anodised aluminium







This orientation not possible for WS-10-40/ WS-10-80/WS-10-120

Hard-anodised surfaces
▶ Page 958

Curved rail profiles
▶ Page 962

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	di	L	a	A1	b	h	h1	h2	G1	G2	a1[62]	Q1	Q2
	[kg/m]	±0.25			Max.											
WS-10-30	0.85	18	10–0.1	–	4,000	30–0.5	16.5	30	5.5	5.5[58]	9	25	15	–	–	–
WS-10-40	1.00	18	10–0.1	–	4,000	40–0.5	16.5	40	5.5	5.5[58]	9	30	20	–	–	–
WS-10-80	1.50	18	10–0.1	–	4,000	74–0.7	16.5	74	5.5	5.5[58]	9	27	17	40	–	–
WS-10-120	2.02	18	10–0.1	–	4,000	120–0.7	16.5	120	5.5	5.5[58]	9	30	20	80	–	–
WS-16-60	1.96	27	16–0.1	8.0	4,000	54–0.5	25.0	58	7.5	3.5	14	43	29	–	32	28
WS-20-80	3.30	36	20–0.1	10.2	4,000	74–0.7	30.0	82	9.5	4.5	20	38	21	40	37	37
WS-25-120	5.8	45	25–0.15	14.0	4,000	120–0.7	37.5	131	11.5	5.5	25	46.5	25.5	80	45.5	46

[57] Height dimension minus the bearing clearance tolerance

[62] WS-10-40/-16-60 a single row of mounting holes down the centreline; WS-10-80/-10-120/-20-80/-25-120 two parallel rows of mounting holes

Part No.	C4	C5		C6		K1 for screw	Geometrical moment of inertia		Moment of resistance	
		Min.	Max.	Min.	Max.		Iy	Iz	Wby	Wbz
						DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WS-10-30	120	20	79.5	20	79.5	M5[58]	47,500	4,400	2,370	540
WS-10-40	120	20	79.5	20	79.5	M6[58]	91,000	5,100	3,600	590
WS-10-80	120	20	79.5	20	79.5	M6[58]	388,000	6,100	9,200	650
WS-10-120	120	20	79.5	20	79.5	M6[58]	1,303,000	7,100	20,000	720
WS-16-60	120	20	79.5	20	79.5	M8	367,600	26,100	9,900	1,900
WS-20-80	120	20	79.5	20	79.5	M8	1,080,000	78,700	21,000	4,000
WS-25-120	150	25	99.5	25	99.5	M10	4,867,000	215,000	62,400	8,500

Standard hole pattern: C5 = C6, please order with drawing for C5 ≠ C6.

[58] Plain holes

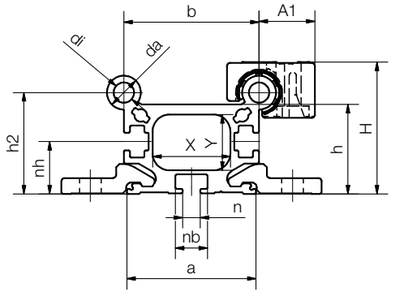
drylin® W profile guides | Product range

High profile rails, round, hard-anodised aluminium

WSX-10-40

WSX-10-80

WSX-16-60



Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	di	L	a	A1	b	h	h2	s	K1	C1	C3	G1
	[kg/m]	±0.25	–0.1		Max.										
WSX-10-40	1.3	39 ±0.02	10	6	4,000	38.2	16.5	40	26.5	30	60	M6	29	16	30
WSX-10-80	2	39 ±0.02	10	6	4,000	72.2	16.5	74	26.5	30	94	M6	29	16	47
WSX-16-60	4.2	65 ±0.02	16	6	4,000	62	25	58	49	52	100	M8	36	18	50

nh	n	nb	X	Y	Surface inertia-moment		Moment of resistance	
					Iy	Iz	Wby	Wbz
					[mm⁴]	[mm⁴]	[mm³]	[mm³]
15.5	5.2	9.5	23	16	97,560	54,910	3,902	3,074
15.5	5.2	9.5	55	16	483,653	83,613	11,515	4,684
27.6	10	15.4	40	27.0	540,876	773,489	14,618	24,586

[57] Height dimension minus the bearing clearance tolerance

Order key

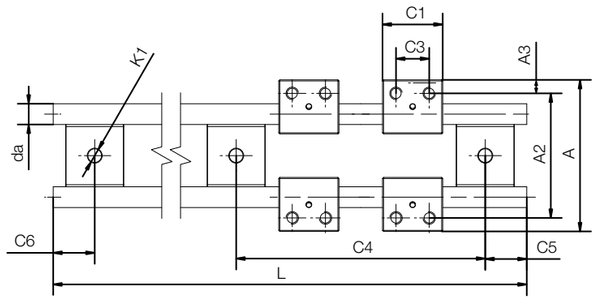
Type	Length
WS- 10 - 40 - 3000	
Profile rail, round	Shaft Ø
	Rail width [mm]
	Rail length [mm]

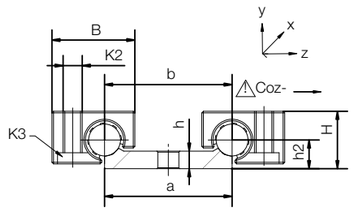
Order key

Type			Length
WS X - 10 - 40 - 4000			
Profile rail	High profile rail	Shaft Ø	Rail width [mm]	Rail length [mm]

drylin® W profile guides | Product range

Double rail made of 316 stainless steel





Installation size 10–20	
Housing and shaft support material	AISI 316
Shaft material	AISI 316Ti
Installation size 25	
Shaft, shaft support and housing material	AISI 316Ti

Technical data and dimensions [mm]

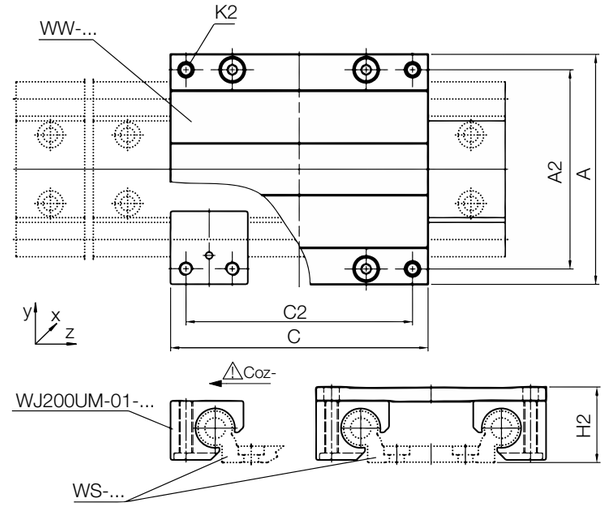
Part No.	Weight	H[57]	da	L	a	b	h	h2	A	A2
	[kg/m]	±0.25	h9	Max.	–0.3					
WS-10-40-ES-FG	1.58	18	10	3,000	40	40	5.5	9	73	60

Part No.	C4	C5 Min.	C5 Max.	C6 Min.	C6 Max.	K1 for screw DIN 912
WS-10-40-ES-FG	120	20	79.5	20	79.5	M6

[57] Height dimension minus the bearing clearance tolerance

drylin® W profile guides | Product range

Assembled guide carriages, round



In the following sizes, also available with adjustable bearing clearance:
10, 16 and 20; order example: WWE-10-40-15

Technical data and dimensions [mm]

Part No.[64]	Weight	A	C	A2	C2	K2	H2[57]	Static load capacity				
		Width	Length				±0.25	Coy	Coz	Mox	Moy	Moz
	[kg]							[N]	[N]	[Nm]	[Nm]	[Nm]
WW-10-30-08	0.26	63	80	50	67	M6	24	4,800	2,400	72	120	120
WW-10-30-10	0.28	63	100	50	87	M6	24	4,800	2,400	72	170	170
WW-10-30-15	0.32	63	150	50	137	M6	24	4,800	2,400	72	290	290
WW-10-40-10	0.29	73	100	60	87	M6	24	4,800	2,400	96	170	170
WW-10-40-15	0.34	73	150	60	137	M6	24	4,800	2,400	96	290	290
WW-10-40-20	0.40	73	200	60	187	M6	24	4,800	2,400	96	410	410
WW-10-80-10	0.34	107	100	94	87	M6	24	4,800	2,400	178	170	170
WW-10-80-15	0.42	107	150	94	137	M6	24	4,800	2,400	178	290	290
WW-10-80-20	0.50	107	200	94	187	M6	24	4,800	2,400	178	410	410
WW-10-120-10	0.41	153	100	140	87	M6	24	4,800	2,400	288	170	170
WW-10-120-15	0.54	153	150	140	137	M6	24	4,800	2,400	288	290	290
WW-10-120-20	0.66	153	200	140	187	M6	24	4,800	2,400	288	410	410
WW-16-60-10	0.71	104	100	86	82	M8	35	8,400	4,200	240	270	270
WW-16-60-15	0.84	104	150	86	132	M8	35	8,400	4,200	240	480	480
WW-16-60-20	0.97	104	200	86	182	M8	35	8,400	4,200	240	690	690
WW-20-80-15	1.20	134	150	116	132	M8	44	12,800	6,400	525	670	670
WW-20-80-20	1.30	134	200	116	182	M8	44	12,800	6,400	525	990	990
WW-20-80-25	1.50	134	250	116	232	M8	44	12,800	6,400	525	1,250	1,250
WW-25-120-15	2.54	195	150	173	128	M10	55	19,200	9,600	1,250	880	880
WW-25-120-20	2.80	195	200	173	178	M10	55	19,200	9,600	1,250	1,360	1,360
WW-25-120-25	3.07	195	250	173	228	M10	55	19,200	9,600	1,250	1,840	1,840

[57] Height dimension minus the bearing clearance tolerance [64] Optional with manual clamp, suffix "-HKA"

Can be combined with:

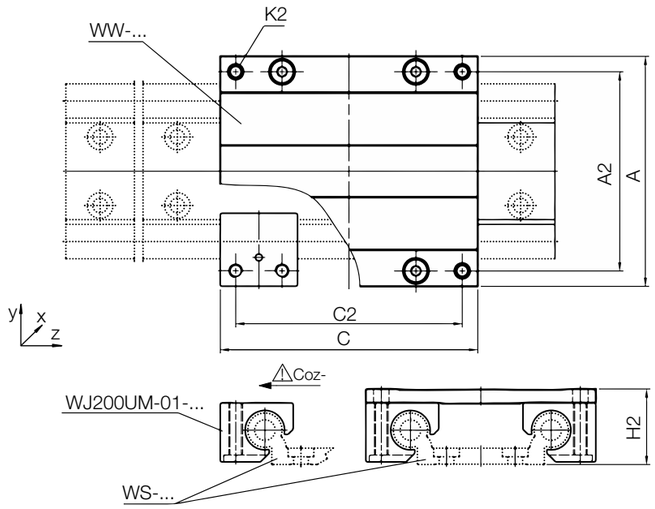
WS-... WS-...-ES-FG WSX-...

Suitable liner material:

iglidur® J iglidur® J200 iglidur® X iglidur® E7 iglidur® A180

drylin® W profile guides | Product range

Assembled stainless steel guide carriages, round



Technical data and dimensions [mm]

Part No.[64]	Weight	A	C	A2	C2	K2	H2[57]		Static load capacity			
		Width	Length				±0.25	Coy	Coz	Mox	Moy	Moz
	[kg]							[N]	[N]	[Nm]	[Nm]	[Nm]
WW-10-40-10-J200-GESG-PES	0.29	73	100	60	87	M6	24	4,800	2,400	96	170	170
WW-10-40-15-J200-GESG-PES	0.34	73	150	60	137	M6	24	4,800	2,400	96	290	290
WW-10-40-20-J200-GESG-PES	0.40	73	200	60	187	M6	24	4,800	2,400	96	410	410

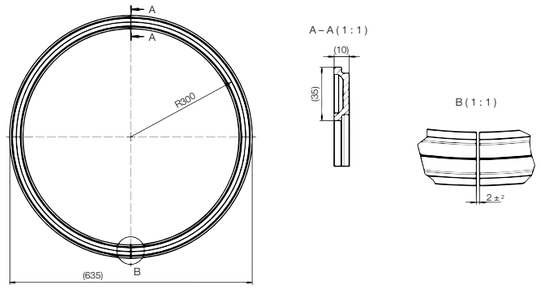
[57] Height dimension minus the bearing clearance tolerance [64] Optional with manual clamp, suffix "-HKA"

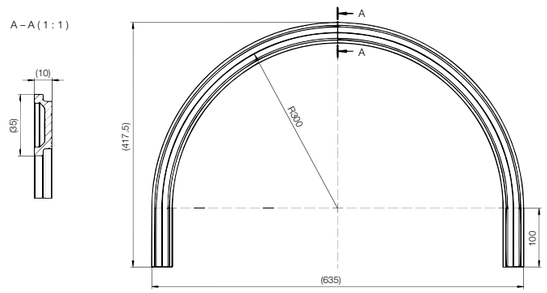
My sketches

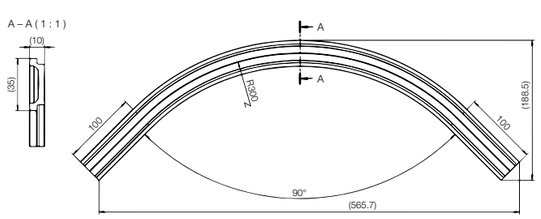
drylin® W profile guides | Product range

Curved rail profiles, square

WSB-06-30-RK300QS







More information
▶ www.igus.eu/curved

Curved rail profiles
▶ Page 962

Technical data and dimensions [mm]

Part No.	Matching carriage for curved rail	Design	Bend radius	End straight
WSB-06-30-RK300F[151)]	WWB-06-30-06-R300	Full circle	300	–
WSB-06-30-RK300HS	WWB-06-30-06-R300	Half circle	300	100
WSB-06-30-RK300QS	WWB-06-30-06-R300	Quarter circle	300	100
WSB-06-30-RK500HS	WWB-06-30-06-R500	Half circle	500	100
WSB-06-30-RK500QS	WWB-06-30-06-R500	Quarter circle	500	100

[151)] The F version (full circle) has a transition of 2mm (±0.2). Due to the bending process, material displacement tolerances, which can be up to several millimetres depending on the bend direction and radius, must be taken into account.

RK: Radius curved bending
S: Straight rail ends in the case of semicircle and quarter circle

Can be combined with:

WWB-...

drylin® W profile guides | Product range

Curved rail profiles, round

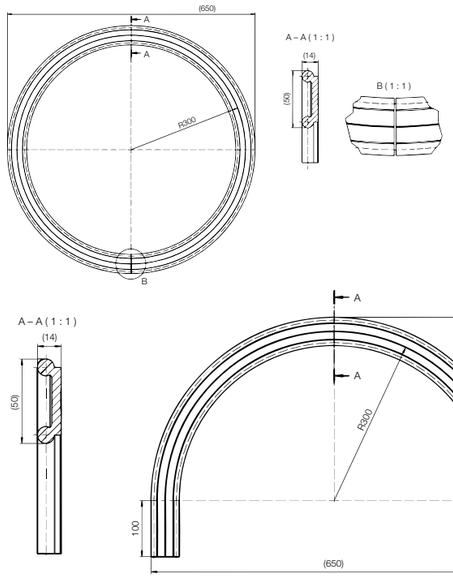
WSB-10-40-RK300QS

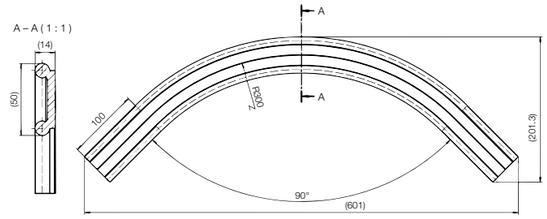
Order key

Type	Size	Option

WSB-06-30-RK 300- F

Curved rail profile	Shaft Ø	Profile width [mm]	RK: Radius curved bending	With spring pre-load	Full circle





Technical data and dimensions [mm]

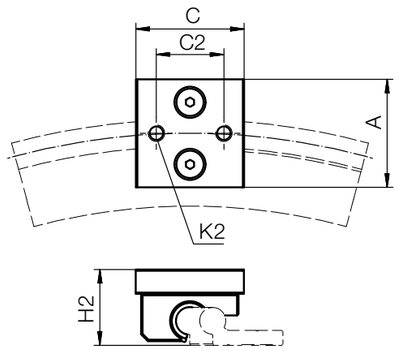
Part No.	Matching carriage for curved rail	Design	Bend radius	End straight
WSB-10-40-RK300F[151)]	WWB-10-40-10-R300	Full circle	300	–
WSB-10-40-RK300HS	WWB-10-40-10-R300	Half circle	300	100
WSB-10-40-RK300QS	WWB-10-40-10-R300	Quarter circle	300	100
WSB-10-40-RK500F[151)]	WWB-10-40-10-R500	Full circle	500	–
WSB-10-40-RK500HS	WWB-10-40-10-R500	Half circle	500	100
WSB-10-40-RK500QS	WWB-10-40-10-R500	Quarter circle	500	100

[151)] The F version (full circle) has a transition of 2mm (±0.2). Due to the bending process, material displacement tolerances, which can be up to several millimetres depending on the bend direction and radius, must be taken into account.

RK: Radius curved bending
S: Straight rail ends in the case of semicircle and quarter circle

drylin® W profile guides | Product range

Single bearings for curved rails



Order key

Type	Option	Option
WI3U B	P	-01-10-LLZ

drylin® W	Liner material iglidur® I3	Curved	Pre-load	Standard	Size	Floating bearing in y-direction

Dimensions [mm]

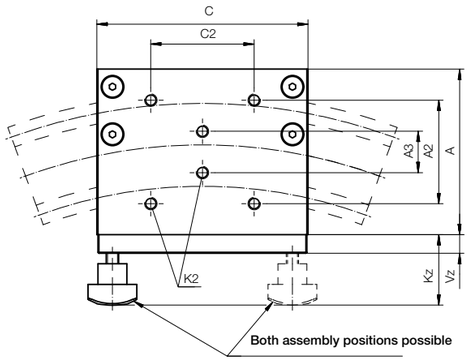
Part No.	Weight [g]	A	C	C2	K2	H2
WI3UBP-01-10	50	40	40	25	M6	28
WI3UBP-01-10-R300-LLZ	44	40	40	25	M6	28
WI3UBP-01-10-R500-LLZ	44	40	40	25	M6	28
WI3UBP-01-10-LLZ	44	40	40	25	M6	28

Can be combined with:

WSB-...

drylin® W profile guides | Product range

Carriage for curved rail



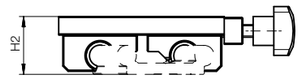
Order key

Type	Size	Option
WWB-10-40-10-	P	-HKA

Guide carriage for curved rails	Shaft Ø	Profile width [mm]	Carriage length [mm]	With spring pre-load	With manual clamp

Options:
Blank: Standard
HKA: With manual clamp

Curved rail profiles
▶ Page 962



Technical data and dimensions [mm]

Part No.[64]	Weight [kg]	A ±0.25	C –0.1	A2	A3	C2	K2	H2	Vz	Kz
WWB-06-30-06	0.31	58	60	30	16	30	M4	20	9	34
WWB-06-30-06-P	0.31	58	60	30	16	30	M4	20	7.5	29
WWB-06-30-06-R300[143]-P	0.31	58	60	30	16	30	M4	20	7.5	29
WWB-10-40-10	0.35	80	102	50	20	50	M6	28	9	34
WWB-10-40-10-P	0.35	80	102	50	20	50	M6	28	9	34
WWB-10-40-10-R300[143]-P	0.35	80	102	50	20	50	M6	28	9	34

[64] Optional with manual clamp, suffix "-HKA"
[143] Optional for 500mm radius = R500

Can be combined with:

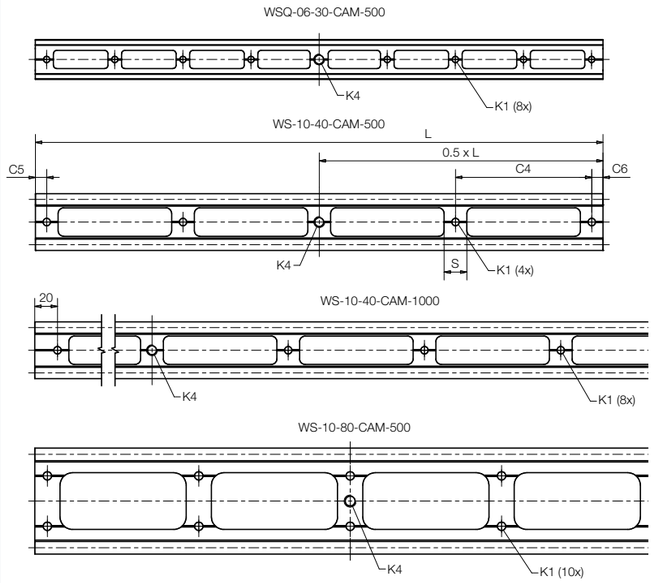
WS-... WS-...-ES-FG WSB-...

More information
▶ www.igus.eu/curved

drylin® W profile guides | Product range

Double rails, reduced weight, hard-anodised aluminium

- 30% weight reduction through machined recesses
- Suitable pillow blocks and carriages made from plastic, aluminium, zinc die-casting or stainless steel



drylin® W guide rails – dimensions [mm]

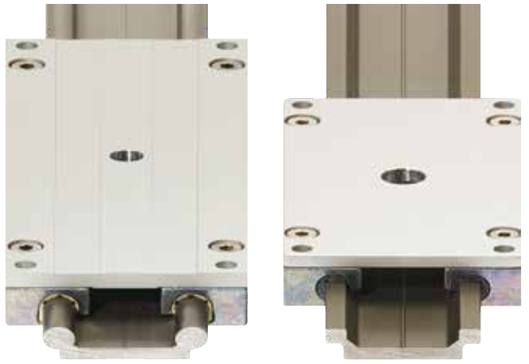
Part No.	Identical profile	L	C4	C5	C6	S	K1 for screw DIN 192	K4	Weight [g]
WSQ-06-30-CAM-500	WSQ-06-30	500	60	10	10	12	M5	3/8" 16-UNC[63]	159
WS-10-40-CAM-500	WS-10-40	500	120	10	10	20	M6	3/8" 16-UNC[63]	353
WS-10-40-CAM-1000	WS-10-40	1,000	120	20	20	20	M6	3/8" 16-UNC[63]	706
WS-10-80-CAM-500	WS-10-80	500	120	10	10	20	M6	3/8" 16-UNC[63]	482

[63] UNC = Unified National Coarse, Anglo-American. Screw thread standard

Application example:
camera slider with standard rail and carriage
▶ www.igus.eu/camera

drylin® W profile guides | Product range

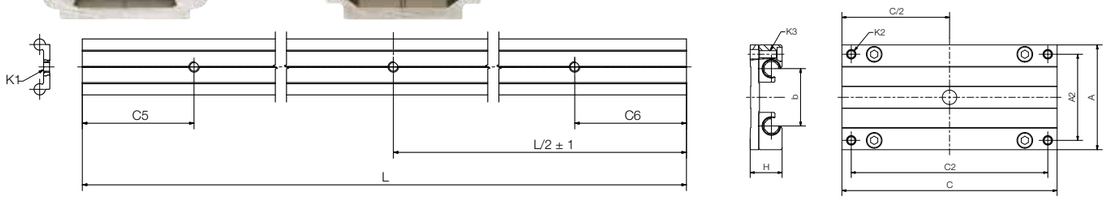
Double rails/carriages for camera slider



- Wear-resistant, smooth and quiet motion
- Adjustable brake level due to the turn-to-fit function
- Easy and fast assembly
- Further dimensions such as standard WS rails
  ▶ Page 992

Technical options:

- Adjustable bearing housing ▶ Page 982
- Manual clamp ▶ Page 1020



drylin® W special rails with 3 holes, 3/8" thread Dimensions [mm]

Part No.	Size	L	C5 ± 1	C6 ± 1	Weight [kg/m]
WSQ-06-30-SL-1000	06	1,000	100	100	0.45
WSQ-06-30-SL-1500	06	1,500	100	100	0.45
WS-10-30-SL-1000	10	1,000	100	100	0.85
WS-10-30-SL-1500	10	1,500	100	100	0.85
WS-10-40-SL-1500	10	1,500	100	100	1.00
WS-10-80-SL-1000	10	1,000	100	100	1.50
WS-10-80-SL-1500	10	1,500	100	100	1.50
WS-16-60-SL-1000	16	1,000	100	100	1.96
WS-16-60-SL-1500	16	1,500	100	100	1.96
WS-20-80-SL-1000	20	1,000	100	100	3.30
WS-20-80-SL-1500	20	1,500	100	100	3.30

drylin® W complete carriage with Ø 10mm through hole for 3/8" thread Dimensions [mm]

Part No.	Size	C	A
WW-06-30-06-SL	06	60	54
WW-06-30-08-SL	06	80	54
WW-06-30-10-SL	06	100	54
WW-10-30-10-SL[64) 65)]	10	100	63
WW-10-30-15-SL[64) 65)]	10	150	63
WW-10-40-10-SL[64) 65)]	10	100	73
WW-10-40-15-SL[64) 65)]	10	150	73
WW-10-40-20-SL[64) 65)]	10	200	73
WW-10-80-10-SL[64) 65)]	10	100	107

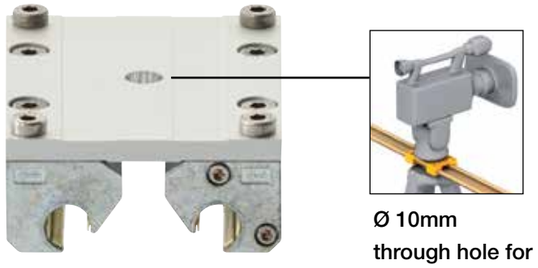
Part No.	Size	C	A
WW-10-80-15-SL[64) 65)]	10	150	107
WW-10-80-20-SL[64) 65)]	10	200	107
WW-16-60-10-SL[65)]	16	100	104
WW-16-60-15-SL[64) 65)]	16	150	104
WW-16-60-20-SL[64) 65)]	16	200	104
WW-20-80-15-SL[64) 65)]	20	150	134
WW-20-80-20-SL[64) 65)]	20	200	134
WW-20-80-25-SL[64) 65)]	20	250	134

[64] Optional with manual clamp, suffix "-HKA"

[65] Optional with adjustable "Turn-To-Fit" bearing (Order example: WWE-…)

drylin® W profile guides | Product range

Hybrid slider carriages with four double roller bearings:



Ø 10mm
through hole for
3/8" thread for
cameras

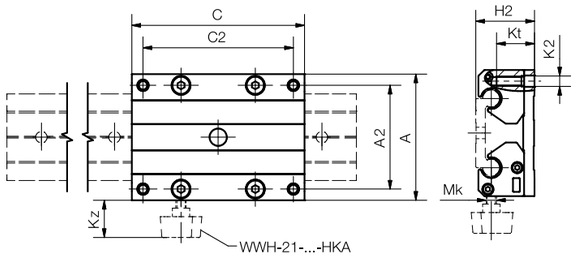
Order key

Type	Dimensions	Design

W WH- 21- 10- 40- 10- SL

drylin® W	Hybrid carriage	Double roller bearing	Installation size	Carriage length [mm]	Slider carriage

Optional with manual clamp,
suffix "-HKA"



Technical data and dimensions [mm]

Part No.	Weight	A Width	C Length	A2	C2	K2	Kt	H2	Static load capacity Coy
	[kg]								[N]
WWH-21-10-40-10-SL	0.59	73	100	60	87	M6	21	34	1,400
WWH-21-10-40-15-SL	0.64	73	150	60	137	M6	21	34	1,400
WWH-21-10-40-20-SL	0.70	73	200	60	187	M6	21	34	1,400
WWH-21-10-80-10-SL	0.64	107	100	94	87	M6	21	34	1,400
WWH-21-10-80-15-SL	0.72	107	150	94	137	M6	21	34	1,400
WWH-21-10-80-20-SL	0.80	107	200	94	187	M6	21	34	1,400
WWH-21-16-60-10-SL	1.31	104	100	86	82	M8	29	49	2,400
WWH-21-16-60-15-SL	1.44	104	150	86	132	M8	29	49	2,400
WWH-21-16-60-20-SL	1.57	104	200	86	182	M8	29	49	2,400
WWH-21-20-80-15-SL	1.72	134	150	116	132	M8	24	57	3,360
WWH-21-20-80-20-SL	1.82	134	200	116	182	M8	24	57	3,360
WWH-21-20-80-25-SL	2.02	134	250	116	232	M8	24	57	3,360

Can be combined with:

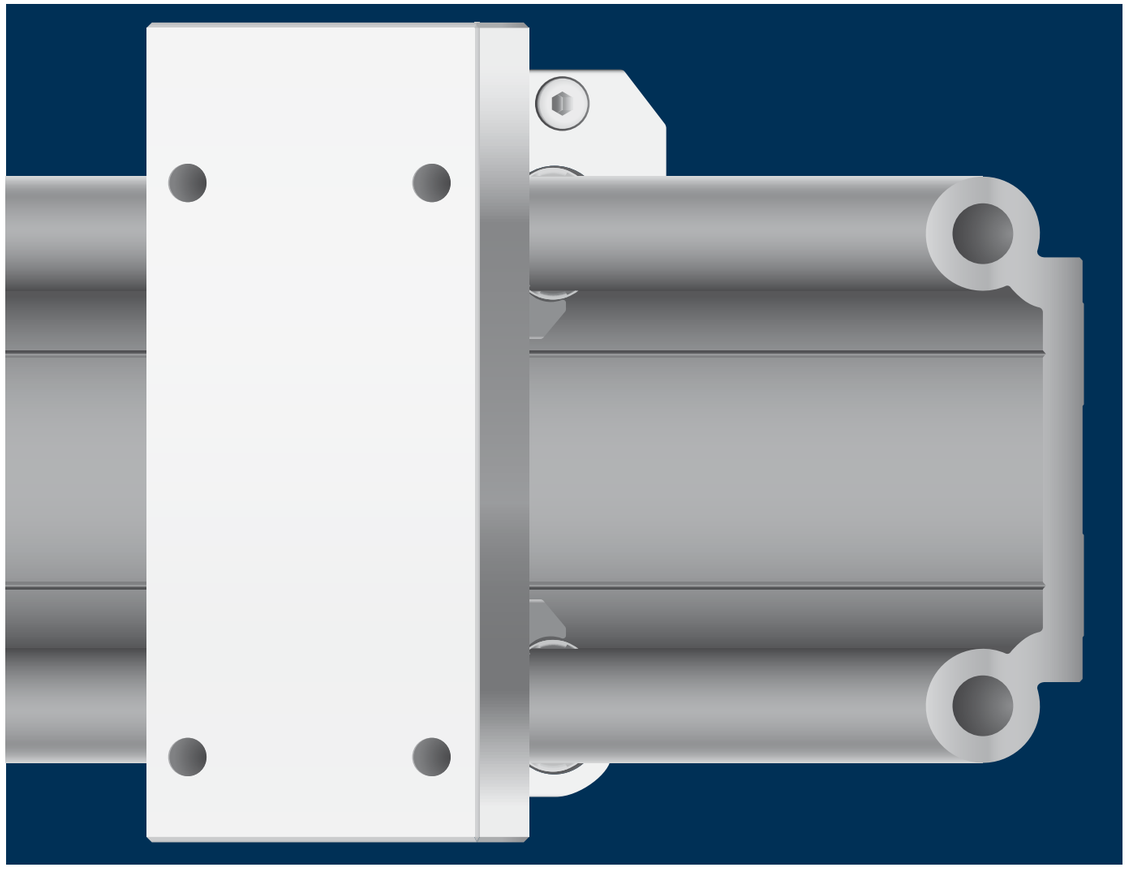
WS-20-80

WS-...-ES-FG


WSX-...

Can be combined with camera slider rails

▶ Page 1002



drylin® linear technology – drylin® W hybrid roller bearings

- Lubrication-free roll and slide
- Low drive force
- For manual adjustment
- Suitable for radial loads
- Single bearings and complete carriages

drylin® W hybrid roller bearings | Advantages

Hybrid roller bearings from the drylin® W linear construction kit

Combined sliding and rolling for low driving forces

drylin® hybrid roller bearings offer an unique lubrication-free combination of plain and roller bearings. The integrated rollers achieve low driving forces, while the sliding effect simultaneously protect against radial loads. This makes drylin® hybrid roller bearings ideal for manual adjustments in door applications (e.g. machine doors, safety doors), but also in mobile control panels. The efficient design using plastics with zinc die-casting also cuts costs. Hybrid bearings can be used on various hard-anodised aluminium profiles from the drylin® W linear construction kit.

- Smooth operation
- Low-profile
- Offset and abuse forces are easily absorbed by sliding elements
- Location on rail ensures reliability
- Matching guide rails made from hard-anodised aluminium
- Low driving force required
- Cost-effective

Typical application areas

- Machine doors
- Safety doors
- Operator panels

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Service life calculation
▶ **www.igus.eu/drylin-expert**

Tightening torque for drylin® metallic screws
▶ **Page 963**

drylin® W hybrid roller bearings | Product overview

Slide and roll

Hybrid roller bearing rail

- Ideal for flat structures
- Geometry optimised for hybrid roller bearings
- Low profile design with wide support

▶ **Page 1010**

Hybrid roller bearing for WSR roller bearing rail

- Suitable for WAS hybrid roller bearing rail
- Hybrid roller bearing with double rollers for better force absorption
- Hybrid roller bearings with single rollers as support

▶ **Page 1011**

Hybrid roller bearings with single roller

- Lubrication-free due to bearing supported plastic roller
- Low displacement force
- Can be combined with drylin® W single and double rails

▶ **Page 1012**

Hybrid roller bearings with double rollers

- Low coefficient of rolling friction is still maintained with deviating load directions
- Increased load capacity
- Variable bearing removed, but the housing is now available in corrosion-resistant stainless steel as well.

▶ **Page 1013**

Complete carriages WWR

- Complete carriage for lateral adjustments
- Guidance via a double rail without support
- Also available as a short, compact carriage for variable multi-carriage solution

▶ **Page 1015**

Complete carriages WWH

- Complete carriage with 4 integrated hybrid roller bearings
- For horizontal installation
- Variable carriage lengths and widths

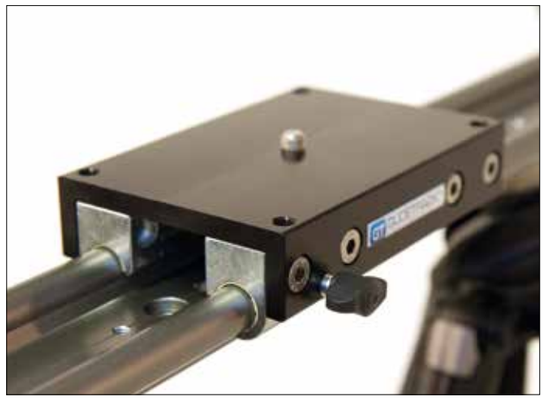
▶ **Page 1016**

Suitable rail profiles
▶ **From page 978**

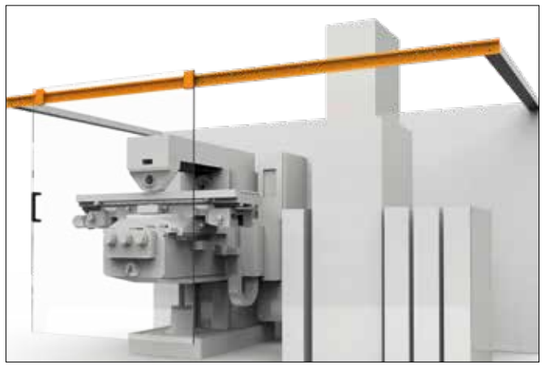
Camera slider
▶ **From page 1003**

The smooth, quiet operation and the enormous cost advantages are obtained by the use of the drylin® linear bearings on the hard-anodised guide shaft to guide the doors of machine tools.

Adjustment control panel unit



Camera stand with drylin® W hybrid roller bearings for far smoother running. Vertical movements are now also possible.



The new drylin® W hybrid carriage with "door opener" function.

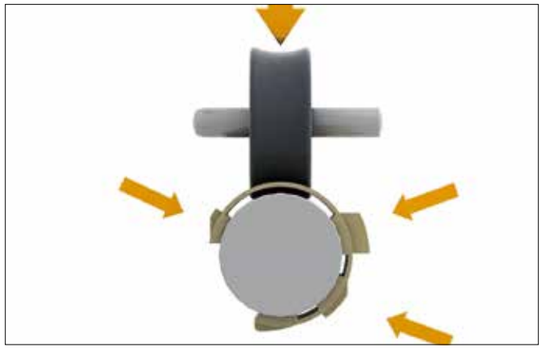
drylin® W hybrid roller bearings in combination with drylin® W profile guides offer optimum opportunities to construct dollies and sliders.

drylin® W hybrid roller bearings type 01

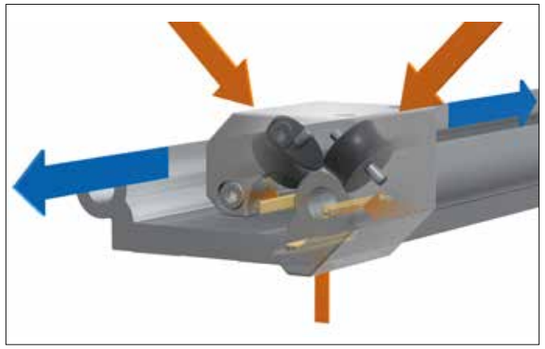
The drylin® W hybrid roller bearings from the WJRM-01-... type series are each equipped with a bearing-supported plastic roller. The bearing housing is available in three installation sizes and can be used with drylin® W single or double shaft rails in two installation positions. The hybrid roller bearing should be installed so that the load capacity is applied in the roll direction. Different load directions are possible but causes higher displacement forces.

drylin® W hybrid roller bearings type 21

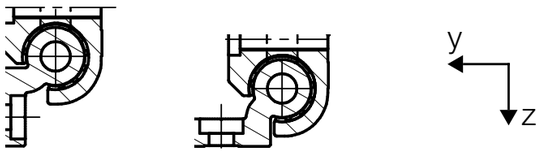
The drylin® W hybrid roller bearings in the WJRM-21-... type series are each equipped with two bearing-supported plastic rollers at an angle of 70° or 80°. Available in three installation sizes, they can be combined with drylin® W single and double rails. The double roller bearings offer a higher load capacity than with a vertical bearing load on the installation area (y-direction). The low coefficient of rolling friction is still maintained with load directions that slightly deviate from this.



Forces absorbed by hybrid roller bearing



Hybrid double roller bearing applicable force absorption

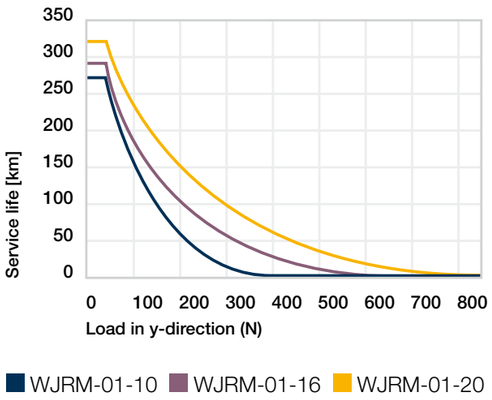


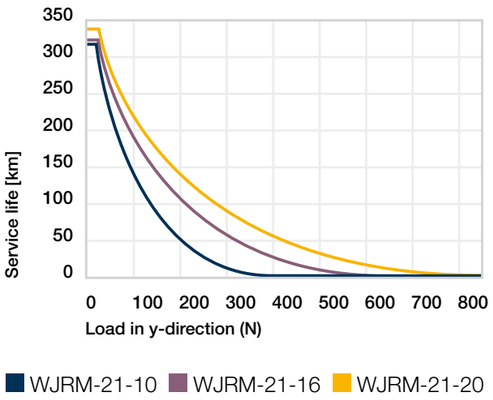
Installation position 01

Installation position 02

Installation position WJRM-01-...

Installation position WJRM-21-...



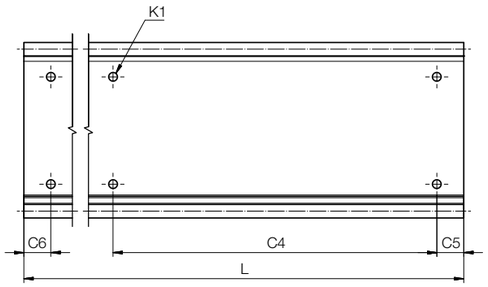


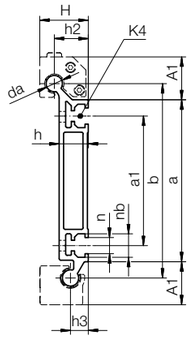
drylin® W hybrid roller bearings | Product range New

Hybrid rail for lateral installation

Order key

Type	Size
WSR	10 - 120 - 4000
Hybrid lateral rail	Shaft Ø / Rail width [mm] / Rail length [mm]





Technical data [mm]

Part No.		Geometrical moment of inertia Iy [mm⁴]	Geometrical moment of inertia Iz [mm⁴]	Moment of resistance Wby [mm³]	Moment of resistance Wbz [mm³]	K1 for screw	K4 for slot nut	Weight [kg/m]
WSR-10-120	New	1,443,000	38,700	22,000	2,600	M6	–	2.58
WSR-10-120-UNGEBOHRT	New	1,443,000	38,700	22,000	2,600	–	MSX-B-0001-M6	2.58

Dimensions [mm]

Part No.		H ±0.25	da –0.1	L Max.	a ±0.6	A1	b	h	h2	h3	a1	n	nb	C4	C5 = C6 Min.	C5 = C6 Max.
WSR-10-120	New	30	10	4,000	100	26.5	120	18	21	11	80	10	14.5	240	20	199.5
WSR-10-120-UNGEBOHRT	New	30	10	4,000	100	26.5	120	18	21	11	80	10	14.5	–	–	–

Can be combined with:

WJRM-31...

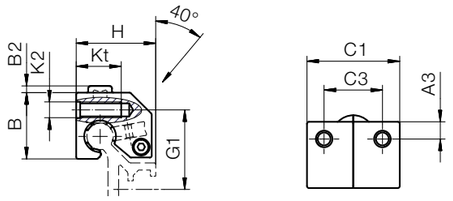
WJRM-41...

drylin® W hybrid roller bearings | Product range New

Hybrid roller bearing for lateral rail

WJRM-31-10

WJRM-41-10



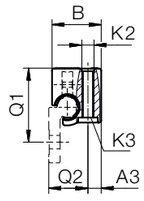
WJRM-41

Order key

Type	Size
WJRM	- 31 - 10
Hybrid roller bearing	Double roller bearing / Size 10

Options:
31: Single roller bearing, bottom assembly for better support
41: Double roller bearing, top assembly for better force absorption

Suitable mounting plate
▶ Page 1018



WJRM-31
Installation position 01

Technical data [mm]

Part No.		Static load capacity Co [N]	Dyn. load capacity Cz+ at total running distance [km] 10 [N]	100 [N]	200 [N]	Coefficient of friction in z-direction [µ]	F · v Max. [N · m/s]	Weight [g]
WJRM-31-10	New	250	250	90	50	< 0.1	50	91
WJRM-41-10	New	250	250	90	50	< 0.1	50	97

Dimensions [mm]

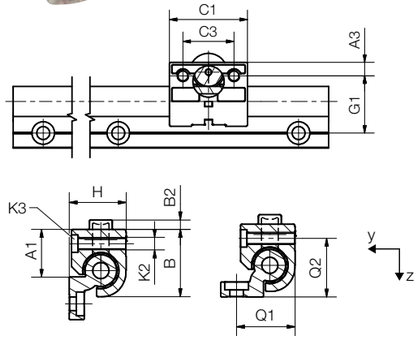
Part No.		A3	B	B2	C1	C3	H	G1	K2 for thread	K3 for screw	Q1	Q2	kt
WJRM-31-10	New	6.5	24	–	35	22	28	27	M6	M5	36	19	16
WJRM-41-10	New	6.5	25	2.5	35	22	30	30	M6	M5	–	–	–

Can be combined with:

WSR-...

drylin® W hybrid roller bearings | Product range

Hybrid roller bearings



Installation position 01

Installation position 02

Order key

Type	Size
WJRM - 01 - 10	

Hybrid roller bearing

Single roller bearing

Size 10

Options:
Blank: Bearing supported plastic roller
BB: Ball bearing supported plastic roller

Suitable mounting plate
▶ Page 1018

Installation position 02 in installation size Ø 10 when using a WJRM-02-10 hybrid roller bearing

Technical data and dimensions [mm]

Part No.	Static load capacity Co	Dyn. load capacity Cy+ at total running distance [km] 10	100	200	F · v Max.	Weight
	[N]	[N]	[N]	[N]	[N · m/s]	[g]
WJRM-01-10[71)]	250	250	90	50	50	46
WJRM-01-10-BB[71)] New	250	250	90	50	100	46
WJRM-01-16	400	400	140	70	80	131
WJRM-01-16-BB New	400	400	140	70	160	131
WJRM-01-20	550	550	200	100	80	232
WJRM-01-20-BB New	550	550	200	100	160	232

Part No.	Coefficient of friction in z-direction	A1	A3	B	B2	C1	C3	G1	H	K2 for thread	K3 for screw	Q1	Q2
	[µ]												
WJRM-01-10[71)]	< 0.10	16.5	6.5	26.0	2.5	35	22	27	18	M6	M5	–	–
WJRM-01-10-BB[71)] New	< 0.03	16.5	6.5	26.0	2.5	35	22	27	18	M6	M5	–	–
WJRM-01-16	< 0.10	25.0	9.0	34.5	5.0	48	30	33	27	M8	M6	32	28
WJRM-01-16-BB New	< 0.03	25.0	9.0	34.5	5.0	48	30	33	27	M8	M6	32	28
WJRM-01-20	< 0.10	30.0	9.0	42.5	6.0	52	34	38	36	M8	M6	37	37
WJRM-01-20-BB New	< 0.03	30.0	9.0	42.5	6.0	52	34	38	36	M8	M6	37	37

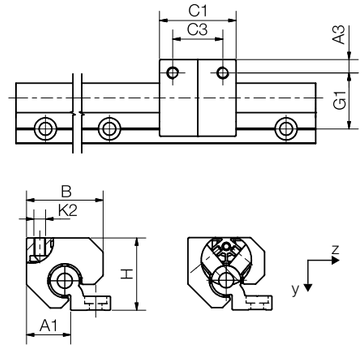
[71)] Deviating from WJRM-02-10, available with an expanded opening angle for installation position 02

Can be combined with:

WS-... WS-..-ES-FG-... WS-... WS-...-ES-FG WSX-...

drylin® W hybrid roller bearings | Product range

Hybrid roller bearings with integrated double angled rollers



Order key

Type	Size
WJRM - 21 - 10	

Hybrid roller bearing

Double roller bearing

Size 10

Options:
Blank: Bearing supported plastic roller
BB: Ball bearing supported plastic roller

Suitable mounting plate
▶ Page 1018

Optional with manual clamp, suffix "-HKA"

Technical data and dimensions [mm]

Part No.	Static load capacity Co	Dyn. load capacity Cz+ at total running distance [km] 10	100	200	F · v Max.	Weight
	[N]	[N]	[N]	[N]	[N · m/s]	[g]
WJRM-21-10	350	350	125	70	50	115
WJRM-21-10-BB New	350	350	125	70	100	115
WJRM-21-16	600	600	210	105	80	250
WJRM-21-16-BB New	600	600	210	105	160	250
WJRM-21-20	840	840	300	150	80	320
WJRM-21-20-BB New	840	840	300	150	160	320

Part No.	Coefficient of friction in y-direction	A1	A3	B	C1	C3	G1	H	K2 for screw
	[µ]								
WJRM-21-10	< 0.10	16.5	6.5	31	35	22	27	28	M6
WJRM-21-10-BB New	< 0.03	16.5	6.5	31	35	22	27	28	M6
WJRM-21-16	< 0.10	25.0	9.0	44	48	30	33	41	M8
WJRM-21-16-BB New	< 0.03	25.0	9.0	44	48	30	33	41	M8
WJRM-21-20	< 0.10	30.0	9.0	52	52	34	38	49	M8
WJRM-21-20-BB New	< 0.03	30.0	9.0	52	52	34	38	49	M8

WJRM-21-10 and WJRM-21-16: 70° angle between the rollers / WJRM-21-20: 80° angle between the rollers

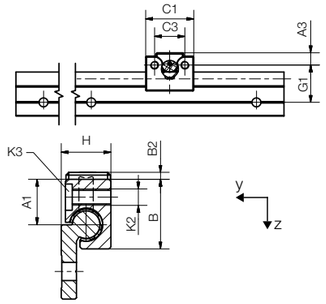
Can be combined with:

WS-... WS-..-ES-FG-... WS-... WS-...-ES-FG WSX-...

drylin® W hybrid roller bearings | Product range

Hybrid roller bearing made from stainless steel

WJRM-01 with single roller



Order key

Type	Size	Material
WJRM-01-10	-	ES

Type: Hybrid roller bearing

Size: Single roller bearing; Size 10

Material: Stainless steel

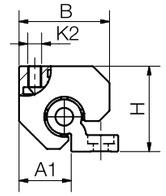
Material
ES: Stainless steel (AISI 316Ti)
ES-FG: Stainless steel precision casting AISI 316
AL: Aluminium

Technical data and dimensions [mm]

Part No.	Static load capacity Co [N]	Dyn. load capacity Cz+ at total running distance [km] 10 [N]	100 [N]	200 [N]	F · v Max. [N · m/s]
WJRM-01-10-ES-FG	250	250	90	50	50
WJRM-01-10-AL	250	250	90	50	50

Part No.	Coefficient of friction in z-direction [µ]	y-direction [µ]	Weight [g]	A1	A3	B	B2	C1	C3	G1	H	K2	K3 for screw
WJRM-01-10-ES-FG	< 0.1	–	57	16.5	6.5	26	2.5	35	22	27	18	M6	M5
WJRM-01-10-AL	< 0.1	–	18	16.5	6.5	26	2.5	35	22	27	18	M6	M5

WJRM-21 with double roller



Order key

Type	Size	Material
WJRM-21-20	-	ES

Type: Hybrid roller bearing

Size: Double roller bearing; Size 20

Material: Stainless steel

Material
ES: Stainless steel (AISI 316Ti)
ES-FG: Stainless steel precision casting AISI 316

Technical data and dimensions [mm]

Part No.	Static load capacity Co [N]	Dyn. load capacity Cz+ at total running distance [km] 10 [N]	100 [N]	200 [N]	F · v Max. [N · m/s]
WJRM-21-20-ES-FG	840	840	300	150	80

Part No.	Coefficient of friction in z-direction [µ]	y-direction [µ]	Weight [g]	A1	A3	B	C1	C3	G1	H	K2	K3 for screw
WJRM-21-20-ES-FG	–	< 0.1	504	30	9	52	52	34	38	49	M8	M5

drylin® W hybrid roller bearings | Product range

Hybrid carriages for lateral installation

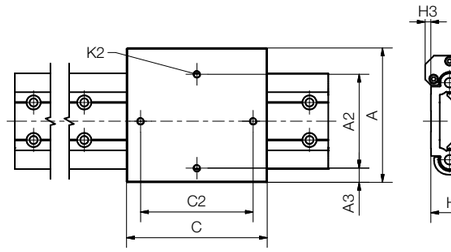
Order key

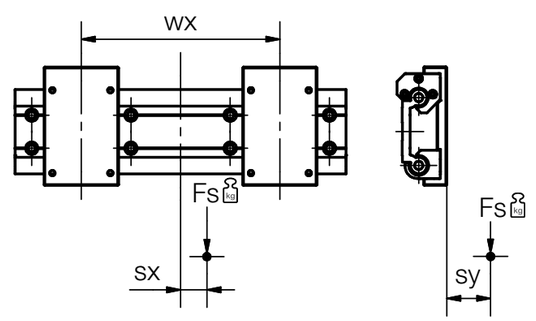
Type	Size	Option
WWR-21-80	-	01

Type: drylin® W; Hybrid carriage; Double roller bearing

Size: Installation size; Compact

Options:
01: Carriage, short design
15: Carriage, long design





Technical data and dimensions [mm]

Part No.	A Width	C Length	A2	C2	K2	H2 ±0.17	A3	H3	sx min.	sx max.	sy min.	sy max.
WWR-21-80-01	143	90	100	70	M8	54	15	6	-49	+49	-34	+34
WWR-21-80-15	143	150	100	120	M8	54	15	6	-wx/2	+wx/2	-34	+34

Order example:
WWR-21-80-01 = Assembled single hybrid carriage as a "door opener" with two single roller hybrid bearings and two double roller hybrid bearings

Can be combined with:

WS-20-80

WS-...-ES-FG


WSX-...

drylin® W hybrid roller bearings | Product range

Hybrid carriages with four double roller bearings

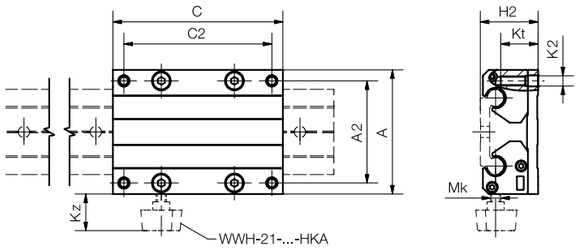
Order key

Type	Dimensions

WWH-21-10-40-10

drylin® W	Hybrid carriage	Double roller bearing	Installation size	Carriage length [mm]

Optional with manual clamp, suffix "-HKA"



Technical data and dimensions [mm]

Part No.	Weight	A	C	A2	C2	K2	Kt	H2	Static load capacity
		Width	Length						Coy
	[kg]								[N]
WWH-21-10-40-10	0.59	73	100	60	87	M6	21	34	1,400
WWH-21-10-40-15	0.64	73	150	60	137	M6	21	34	1,400
WWH-21-10-40-20	0.70	73	200	60	187	M6	21	34	1,400
WWH-21-10-80-10	0.64	107	100	94	87	M6	21	34	1,400
WWH-21-10-80-15	0.72	107	150	94	137	M6	21	34	1,400
WWH-21-10-80-20	0.80	107	200	94	187	M6	21	34	1,400
WWH-21-10-120-10	0.71	153	100	140	87	M6	21	34	1,400
WWH-21-10-120-15	0.84	153	150	140	137	M6	21	34	1,400
WWH-21-10-120-20	0.96	153	200	140	187	M6	21	34	1,400
WWH-21-16-60-10	1.31	104	100	86	82	M8	29	49	2,400
WWH-21-16-60-15	1.44	104	150	86	132	M8	29	49	2,400
WWH-21-16-60-20	1.57	104	200	86	182	M8	29	49	2,400
WWH-21-20-80-15	1.72	134	150	116	132	M8	24	57	3,360
WWH-21-20-80-20	1.82	134	200	116	182	M8	24	57	3,360
WWH-21-20-80-25	2.02	134	250	116	232	M8	24	57	3,360

Can be combined with:

WS-20-80 WS-...-ES-FG WSX-...

drylin® W hybrid roller bearings | Product range

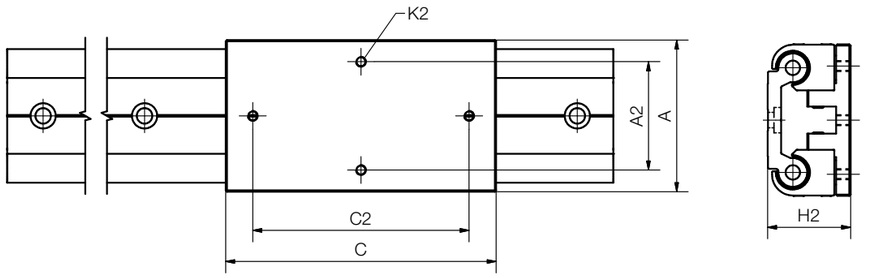
Hybrid carriages with four single roller bearings for horizontal installation

Order key

Type	Dimensions

WWH-10-40-10

drylin® W	Hybrid carriage	Installation size	Carriage length [mm]



Technical data and dimensions [mm]

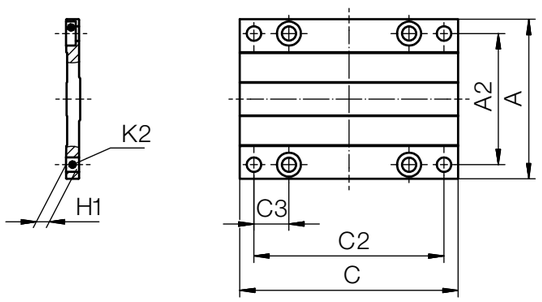
Part No.	Weight	A	A2	C	C2	K2	H2	Stat. load capacity				
								Coy	Coz	Mox	Moy	Moz
	[kg]						±0.17	[N]	[N]	[Nm]	[Nm]	[Nm]
WWH-10-40-10	0.35	58	40	100	80	M5	34	1,000	1,000	20	16	32
WWH-16-60-15	0.96	84	60	150	120	M6	46	1,600	1,600	45	38	77
WWH-20-80-25	1.78	114	90	250	220	M6	55	2,200	2,200	90	435	435

Can be combined with:

WS-... WS-...-ES-FG WSX-...

drylin® W hybrid roller bearings | Product range New

Carriage plates for drylin® W hybrid roller bearings



With four pillow blocks and the mounting plate, a linear carriage can be installed in less than a minute. Mounting plates are available in 3 lengths in each installation size and width.

- Robust corrosion-resistant anodised aluminium
- A variety of combinations of liners/bearings/slide plates are possible, also with manual clamp
- Required combination bearing and mounting plate also available pre-assembled

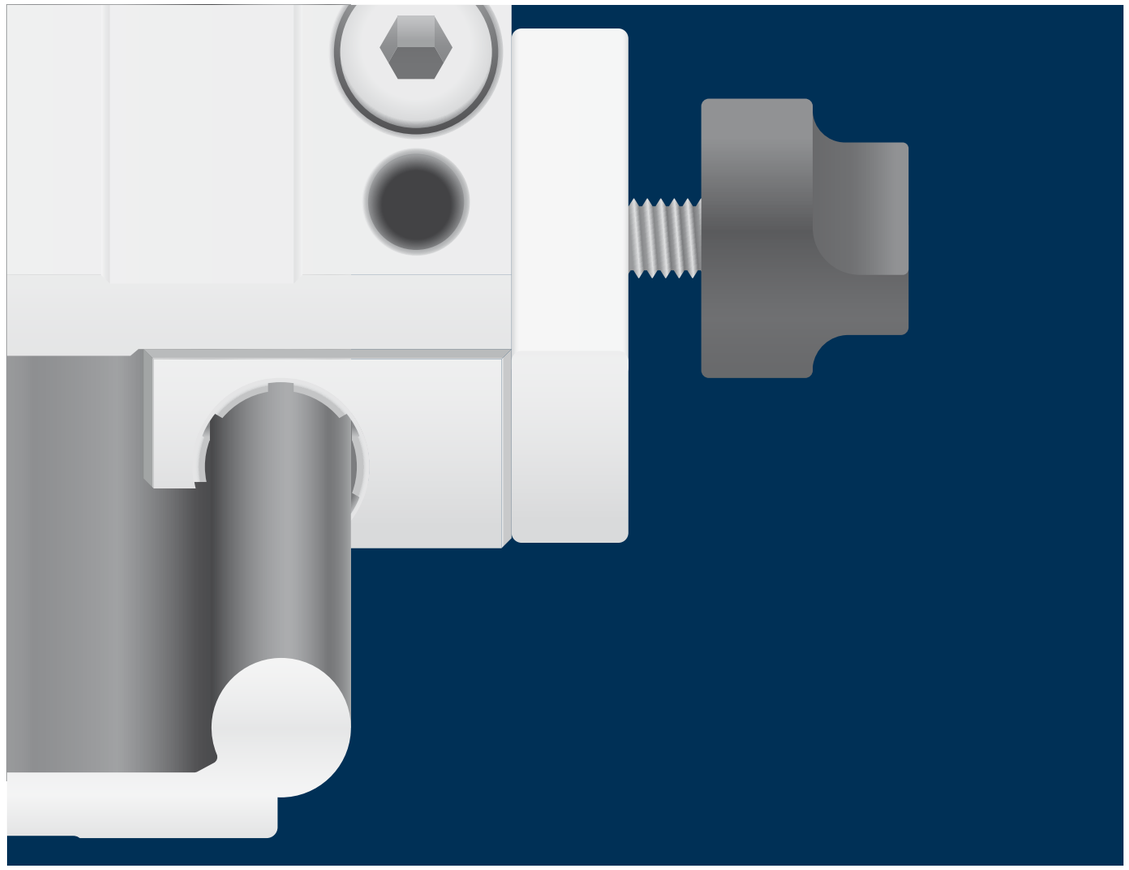
Modular system:
Can be combined with the complete drylin® linear bearing product range. 4 screws included in delivery.

Technical data and dimensions [mm]

Part No.		C	A	H1	A2	K2	Mounting screws included
WWYR-10-30-08-AL	New	80	63	6.5	50	M6	M6
WWYR-10-30-10-AL	New	100	63	6.5	50	M6	M6
WWYR-10-30-15-AL	New	150	63	6.5	50	M6	M6
WWYR-10-40-10-AL	New	100	73	6.5	60	M6	M6
WWYR-10-40-15-AL	New	150	73	6.5	60	M6	M6
WWYR-10-40-20-AL	New	200	73	6.5	60	M6	M6
WWYR-10-80-10-AL	New	100	107	6.5	94	M6	M6
WWYR-10-80-15-AL	New	150	107	6.5	94	M6	M6
WWYR-10-80-20-AL	New	200	107	6.5	94	M6	M6
WWYR-10-120-10-AL	New	100	153	6.5	140	M6	M6
WWYR-10-120-15-AL	New	150	153	6.5	140	M6	M6
WWYR-10-120-20-AL	New	200	153	6.5	140	M6	M6
WWYR-16-60-10-AL	New	100	104	8.5	86	M8	M8
WWYR-16-60-15-AL	New	150	104	8.5	86	M8	M8
WWYR-16-60-20-AL	New	200	104	8.5	86	M8	M8
WWYR-20-80-15-AL	New	150	134	8.5	116	M8	M8
WWYR-20-80-20-AL	New	200	134	8.5	116	M8	M8
WWYR-20-80-25-AL	New	250	134	8.5	116	M8	M8

Suitable for rails ▶ Page 992, 993, 1010
Suitable for bearings ▶ Page 1011, 1012, 1013, 1014

Available from stock

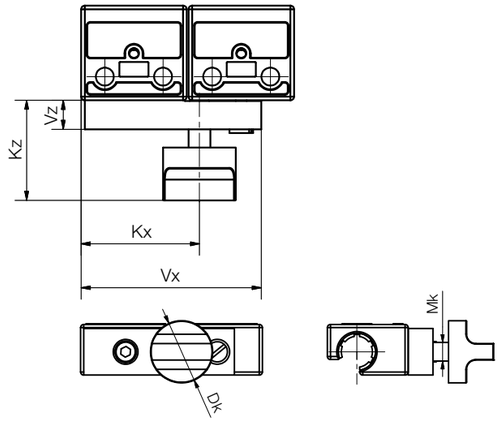


drylin® linear technology – Accessories

- Manual clamps
- Liners
- End caps
- Slot nuts
- Clamps

drylin® W profile guides | Product range

Accessories: Manual clamp for simple positioning



Technical data and dimensions [mm]

Part No.	Mk	Vx	Kx	Vz	Kz	Dk	Min. holding force[67]	Min. tightening torque
WHKA-10[66]	M6	50	33	8	28	20	30N	0.8Nm
WHKA-16[66]	M8	72	41	10	31	28	60N	1.5Nm
WHKA-20[66]	M8	90	62	10	31	28	70N	1.5Nm
WHKA-25[66]	M8	96	65	12	31	28	70N	1.5Nm

[67] Condition: dry rail surface

[66] The manual clamp is also available assembled as a complete carriage (suffix "-HKA", order example: WW-10-40-10-HKA). Dimensions complete carriage WWQ ▶ Page 995

Accessories: Aluminium manual clamp

Technical data and dimensions [mm]

Part No.	Mk	Vx	Kx	Vz	Kz	Dk	Min. holding force[67]	Min. tightening torque
WHKA-10-AL[68]	M6	50	33	8	28	20	30N	0.8Nm
WHKA-16-AL[68]	M8	72	41	10	31	28	60N	1.5Nm
WHKA-20-AL[68]	M8	90	62	10	31	28	70N	1.5Nm
WHKA-25-AL[68]	M8	96	65	12	31	28	70N	1.5Nm

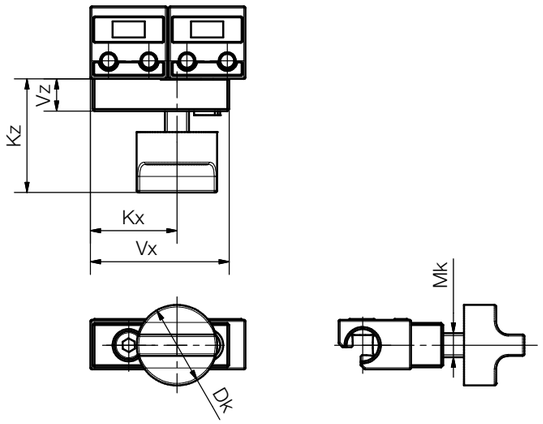
[67] Condition: dry rail surface

[68] The manual clamp is also available assembled as a complete carriage (suffix "-AL-HKA", order example: WW-10-40-10-HKA). Dimensions complete carriage WWQ ▶ Page 995

drylin® W profile guides

drylin® W profile guides | Product range

Accessories: Manual clamp for square rails



Technical data and dimensions [mm]

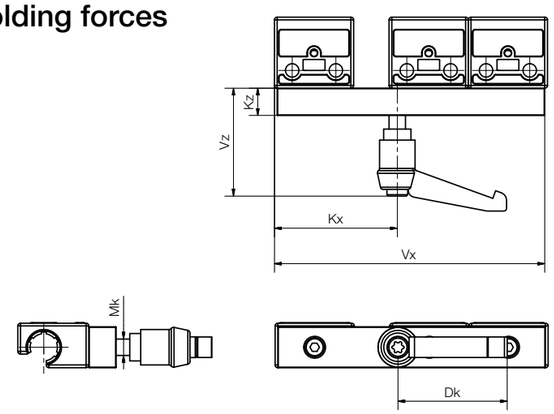
Part No.	Mk	Vx	Kx	Vz	Kz	Dk	Min. holding force[67]	Min. tightening torque
WHKAQ-06[133] [137]	M6	34.5	21.5	8	28	20	30N	0.8Nm
WHKAQ-10[137]	M6	50	33	8	28	20	30N	0.8Nm
WHKAQ-16[137]	M8	72	41	10	31	28	60N	1.5Nm
WHKAQ-20[137]	M8	90	62	10	31	28	70N	1.5Nm

[67] Condition: dry rail surface

[133] Aluminium version available, suffix "-AL"

[137] The manual clamp is also available assembled as a complete carriage (suffix "-HKAQ", order example: WW-06-30-06-HKAQ). Dimensions complete carriage WWQ ▶ Page 990

Accessories: Manual clamp for higher holding forces



Technical data and dimensions [mm]

Part No.	Mk	Vx	Kx	Vz	Kz	Dk	Min. holding force[67]	Min. tightening torque
WHKD-1010[69]	M6	100	45	40	10	40	70N	2.5Nm
WHKD-1015[69]	M6	150	95	40	10	40	70N	2.5Nm
WHKD-1615[69]	M8	150	81	40	12	40	90N	3.5Nm
WHKD-1620[69]	M8	200	131	40	12	40	90N	3.5Nm
WHKD-2015[69]	M8	150	63	40	12	40	90N	3.5Nm
WHKD-2020[69]	M8	200	113	40	12	40	90N	3.5Nm

[67] Condition: dry rail surface

[69] The manual clamp is also available assembled as a complete carriage (suffix "-HKD", order example: WW-10-40-10-HKD). Dimensions complete carriage WWQ ▶ Page 995

drylin® W profile guides | Product range

Accessories: Manual clamp for drylin® W hybrid roller bearings

Order key

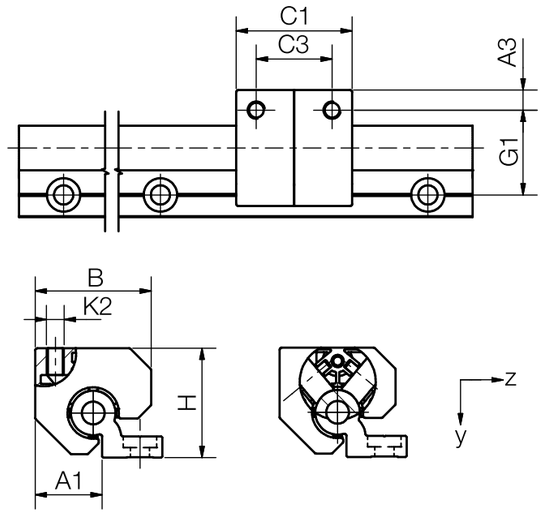
Type	Size	Material
WJRM-21-10	-	HKA

Type
- Hybrid roller bearing
- Double roller bearing

Size
- Size 10

Material
- Stainless steel

Material
ES: Stainless steel (AISI 316Ti)
ES-FG: Stainless steel precision casting AISI 316
AL: Aluminium



Technical data and dimensions [mm]

Part No.	Weight	A1	A3	B	C1	C3	G1	H	K2 for screw	Kz
	[g]									Max.
WJRM-21-10-HKA	115	16.5	6.5	31	35	22	27	28	M6	25
WJRM-21-16-HKA	250	25	9	44	48	30	32	41	M8	25
WJRM-21-20-HKA	320	30	9	52	52	34	38	49	M8	25

drylin® W profile guides

drylin® W profile guides | Product range

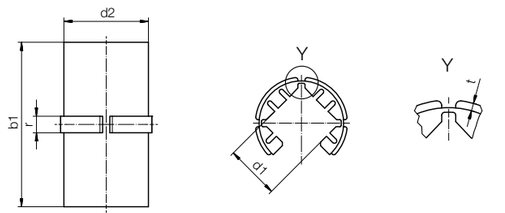
Accessories: Liners and end caps for high profile rails

drylin® W plastic liners – long, open design

Size	Material	Pillow blocks	Liners Part No.	in the drylin® R-Chapter
10/16/20/25 (standard)	iglidur® J200	WJ200UM-01-Ø	J200UMO-01-Ø[70)]	▶ Page 1086
10/16/20/25	iglidur® J	WJUM-01-Ø	JUMO-01-Ø	▶ Page 1080
10/16/20/25 (High temperature)	iglidur® X	WXUM-01-Ø	XUMO-01-Ø	▶ Page 1091
10/16/20/25	iglidur® E7	WE7UM-01-Ø	E7UMO-01-Ø	▶ Page 1088

[70)] **Available also as floating bearing, Part No. J200UMO-01-Ø-LL**

drylin® W liners – long design, square

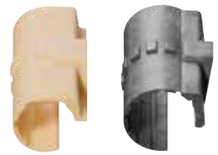


Dimensions [mm]

Part No.	d1	d1 tolerance	d2	b1	r	t
J200QM-01-06	5.0	+0.020 +0.080	8	19	3.0	0.5
J200QM-01-10	7.5	+0.020 +0.080	12	28	3.0	0.8
J200QM-01-16	11.5	+0.020 +0.080	18	35	3.0	0.8
J200QM-01-20	15.0	+0.020 +0.080	23	44	3.5	0.8

Available also as floating bearing J200QM-01-Ø-LLZ (z-direction), J200QM-01-Ø-LLY (y-direction)

drylin® W plastic liners – adjustable



Size	Material	Pillow blocks	Liners Part No.
10 (adjustable)	iglidur® J	WJUME-01-10	JUME-01-10
16/20 (adjustable)	iglidur® J200	WJ200UME-01-Ø	J200UME-01-Ø

drylin® W profile guides | Product range

Accessories: Replacement liners

drylin® W plastic liners

Size	Material	Pillow blocks	Liners Part No.	
10	iglidur® J200	**WJ200UMA-01-10-AL**	**J200UMA-01-10**	
16	iglidur® J200	**WJ200UMA-01-16-AL**	**J200UMA-01-16**	New
20	iglidur® J200	**WJ200UMA-01-20-AL**	**J200UMA-01-20**	New

Replacement kit for WJ200UMA-01-10-AL pillow block

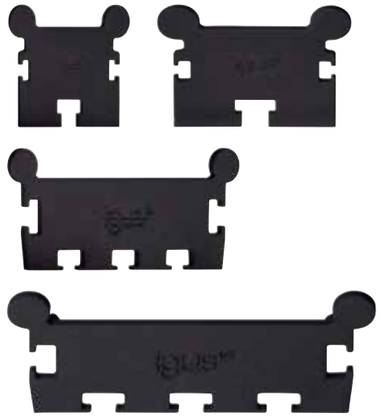
Consisting of
- 4 liners
- 4 housing end caps
- Assembly tool

Part No.:
WEKA-01-10-J200
WEKA-01-16-J200 New
WEKA-01-20-J200 New

drylin® W profile guides | Product range

Accessories

End caps for drylin® high profile rails WSX



- For drylin® W high profile rails WSX
  ▶ **Page 993**
- 4 installation sizes
- Protection of the hollow chambers against the entry of foreign particle
- Easy to fit, easy sideways
- End caps for cutting edges

Part No.:
WSX-063001-EC
WSX-104001-EC
WSX-108001-EC
WSX-166001-EC

Slot nuts for mounting

- Variable positionable
- Ideal for drylin® limit and reference switches
- Suitable for T-slots of the drylin® WSX high-profile rails
  ▶ **Page 987, 993**
- Secure retention
- Can be retrofitted

Part No.	Suitable for rail profile
NOR-20602	WSX-06-30
NOR-20602	WSX-10-40
NOR-20602	WSX-10-80
NOR-20602	AWMQ-12/20
NOR-20602	WSX-16-60
NOR-20605	WSX-16-60

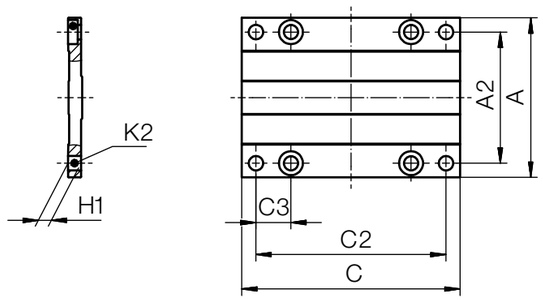
Clamps for WSX high profile rails

- Secure mounting
- Variable positionable
- For drylin® SAW linear modules and ZLW toothed belt axes
- For drylin® WSX high-profile rails
  ▶ **Page 987, 993**

Part No.	Suitable for toothed belt axis
ZTZ-063006	ZLW-0630
75.40 ZLW	ZLW-1040
75.40 ZLW	ZLW-1080
75.50 ZLW	ZLW-1660

drylin® W profile guides | Product range New

Extension of the drylin® W modular system



With four pillow blocks and the mounting plate, a linear carriage can be installed in less than a minute. Mounting plates are available in 3 lengths in each installation size and width.

- Robust corrosion-resistant anodised aluminium
- A variety of combinations of liners/bearings/slide plates are possible, also with manual clamp
- Required combination bearing and mounting plate also available pre-assembled

Modular system:
Can be combined with the complete drylin® linear bearing product range. 4 screws included in delivery.

Technical data and dimensions [mm]

Part No.		C	A	H1	A2	K2	Mounting screws included
WWY-06-30-06-AL	New	60	54	4.0	45	M4	M4
WWY-06-30-08-AL	New	80	54	4.0	45	M4	M4
WWY-06-30-10-AL	New	100	54	4.0	45	M4	M4
WWY-06-60-06-AL	New	60	85	4.0	76	M4	M4
WWY-06-60-08-AL	New	80	85	4.0	76	M4	M4
WWY-06-60-10-AL	New	100	85	4.0	76	M4	M4
WWY-10-30-08-AL	New	80	63	6.5	50	M6	M6
WWY-10-30-10-AL	New	100	63	6.5	50	M6	M6
WWY-10-30-15-AL	New	150	63	6.5	50	M6	M6
WWY-10-40-10-AL	New	100	73	6.5	60	M6	M6
WWY-10-40-15-AL	New	150	73	6.5	60	M6	M6
WWY-10-40-20-AL	New	200	73	6.5	60	M6	M6
WWY-10-80-10-AL	New	100	107	6.5	94	M6	M6
WWY-10-80-15-AL	New	150	107	6.5	94	M6	M6
WWY-10-80-20-AL	New	200	107	6.5	94	M6	M6
WWY-10-120-10-AL	New	100	153	6.5	140	M6	M6
WWY-10-120-15-AL	New	150	153	6.5	140	M6	M6
WWY-10-120-20-AL	New	200	153	6.5	140	M6	M6
WWY-16-60-10-AL	New	100	104	8.5	86	M8	M8
WWY-16-60-15-AL	New	150	104	8.5	86	M8	M8
WWY-16-60-20-AL	New	200	104	8.5	86	M8	M8
WWY-20-80-15-AL	New	150	134	8.5	116	M8	M8
WWY-20-80-20-AL	New	200	134	8.5	116	M8	M8
WWY-20-80-25-AL	New	250	134	8.5	116	M8	M8
WWY-25-120-15-AL	New	150	195	10.0	173	M10	M10
WWY-25-120-20-AL	New	200	195	10.0	173	M10	M10
WWY-25-120-25-AL	New	250	195	10.0	173	M10	M10

Suitable for rails ▶ Page 986, 987, 988, 989, 992, 993
Suitable for bearings ▶ Page 976, 980, 982, 983, 984

drylin® linear technology – drylin® N low-profile linear guides

- Low profile and lightweight
- Lubrication-free dry-tech® sliding elements
- Anodised aluminium rail
- High speed and acceleration possible
- Quiet operation

Lightweight, maintenance-free, corrosion-resistant

Lubrication-free low-profile linear guides – drylin® N

The low-profile range drylin® N offers extremely low profiles in several widths. Like all drylin® products the carriages run without lubrication in an anodised aluminium profile. The selected materials and the unique design make drylin® N a cost-effective and flexible guide system.

- Low profile between 6 and 12mm
- Lightweight
- Many carriage options – also with pre-load
- Maintenance-free dry operation
- Corrosion-free
- Low wear with low coefficient of friction
- Silver or black-anodised rails

Typical application areas

- Agricultural machinery
- Automotive
- Medical technology
- Facade construction
- Packaging industry

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +90°C
(+50°C for overmoulded sliding elements)
Min. –40°C

17mm – 80mm

Service life calculation
▶ www.igus.eu/drylin-expert

Cleanroom certificated
IPA Fraunhofer

Free from toxins
2011/65/EU (RoHS)

ESD-compatible
(electrostatic discharge)

Numerous options in four different widths for small installation heights

Guide rails
- Four installation sizes: 17, 27, 40 and 80mm
- Low profile, lightweight design
- Clear anodised (silver) or black anodised surfaces

▶ **From page 1034**

Guide carriage – installation size 17
- Solid plastic made from high-performance polymer iglidur® J
- Compact for the smallest installation spaces
- Length of carriage up to 40mm

▶ **Page** 1035

Guide carriage – installation size 27
- Carriage with changeable sliding elements
- Sliding carriages with captive overmoulded sliding elements
- Variable lengths and screw on options

▶ **Page 1037**

Guide carriage – installation size 40
- Carriage with thread pin or plain hole
- Pre-load version available

▶ **Page 1039**

Guide carriage – installation size 80
- Carriage with wide load-bearing surface
- Lubrication-free due to high-performance polymers iglidur® J/J200
- Low profile design due to threaded holes

▶ **Page 1041**

Telescopic system
- Continuous lengths up to 1,200mm (total extension)
- Available with partial, total or overextension
- With locking mechanism if required

▶ **Page 1050**

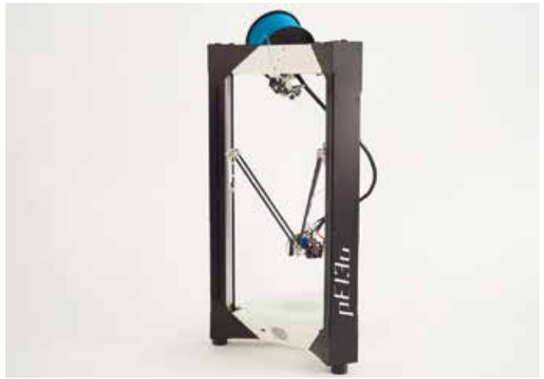
Pre-load prism slides
- Easy positioning of carriage
- Four pre-load classes
- Guaranteed drive force and holding force
- Extremely lightweight low-profile

▶ **From page 1042**

Based on drylin® N
drylin® SLN miniature linear module

▶ **From page1417**

drylin® N low-profile linear guides | Application examples



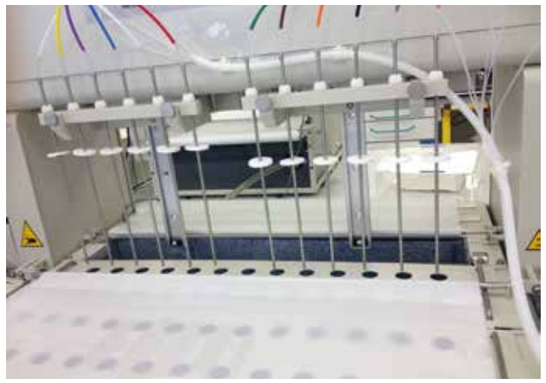
The most important decision criterion for drylin® N low-profile linear guides is the low installation height as this makes it possible to achieve a maximum load.

drylin® N low-profile linear guides and drylin® SD lead screw drives perform the height adjustments. As a black-anodised profile, drylin® N blends into the design of the 3D printer.

In the redesigning of the table guidance for this automated teller, the focus was on a ready-to-install, cost-effective, durable and lubrication-free bearing and system.

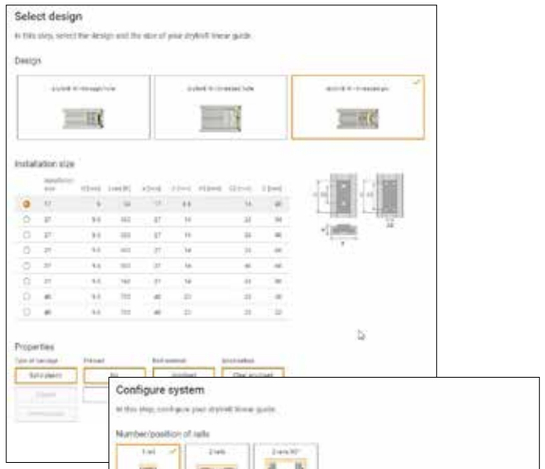
The quiet, lubrication-free, low-profile design of drylin® N made it the ideal solution and enabled it to fulfil all relevant safety requirements. The rails could be connected to the desired length.

The removal unit is moved along the X-Y axis using the space-saving and cost-saving drylin® N low-profile linear guide. The robust drylin® T guide system undertakes the vertical guidance.



The sampling device uses drylin® linear plain bearings to remove the products precisely and smoothly.

drylin® N low-profile linear guides | Online tools



Expert for linear guides: System selection & service life calculation with CAD

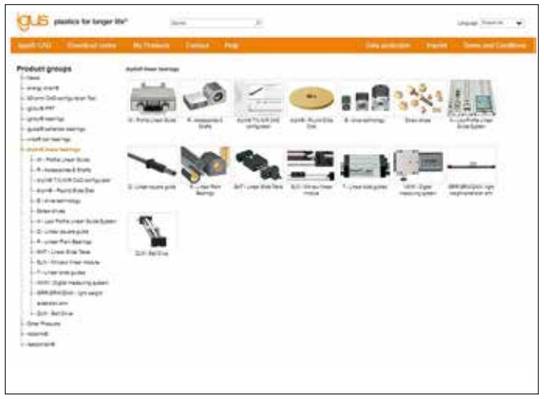
Configure and calculate the service life of linear bearings – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.

▶ www.igus.eu/drylin-expert

Download the online tool app now

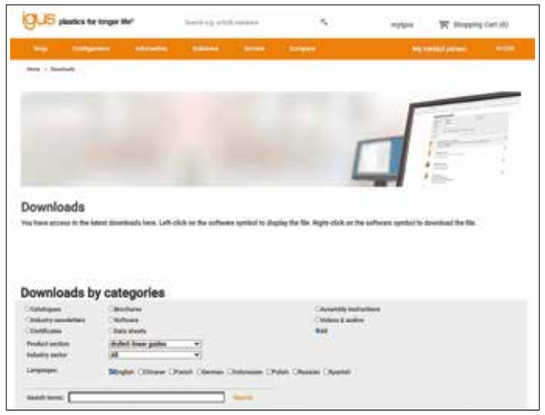
Download on the App Store



drylin® CAD configurator: Generate complete 3D models for drylin® linear technology according to your specifications

The igus® CAD online configurator gives you the ability to design and save your linear guide as a system, individual components directly as a 3D model in all commonly used formats, or to have these sent by e-mail – free of charge and without registration.

▶ www.igus.eu/drylin-CAD



More information about the products can be found in the igus® download area

- Assembly instructions
- Assembly videos
- System design
- Catalogues

▶ www.igus.eu/downloads

Floating bearings version

NW-... NW-... LLZ NW-... LLY NW-... LLYZ

LLZ Floating bearing in z-direction
LLY Floating bearing in y-direction
LLZ Floating bearing in yz-direction

Floating bearing	NW-17	NW-27	NW-40	NW-80
LLY	0.6	0.45	0.4	0.6
LLZ	0.5	0.8	0.8	0.8
LLYZ	Y: 0.6 Y: 0.5	Y: 0.3 Y: 0.4	Y: 0.4 Y: 0.8	Y: 0.6 Y: 0.8

Technical details on floating bearings ▶ Page 963
The 2:1 Rule ▶ Page 963

Technical options for drylin® low-profile linear guides

Clip-on sliding elements

Depending on the installation size, up to three lubrication-free sliding elements made from the high-performance polymer iglidur® J are clipped on around the zinc die-casting carriage body. These can be changed any time simply and fast, the zinc die-casting carriage can be reused. A set of appropriate sliding elements is available for every clip-on carriage (Part No. NEK... ▶ **Page 1048**).

Overmoulded sliding elements

With this carriage type, the zinc die-casting body is made as an integral part of the high-performance polymer iglidur® J/J200 during the injection moulding process. For the user this production process offers the advantage, that the sliding surface is connected captive and insolubly to the carriage. This makes it quicker to install the carriages in the profile. Robust storage is possible, including in the form of bulk goods, as the sliding elements cannot come loose. It is not possible to retrofit sliding elements; the carriages must be entirely replaced at the end of their service life. The continuous operating temperature for overmoulded sliding elements is +50°C.

Pre-load function

The use of sliding elements with an integrated spring pre-load function prevents the carriages in the rail profile from rattling. Adjustment occurs silently using the pre-load principle, making the guide suitable for use in noise-sensitive environments such as the automotive, medical or furniture sectors. Pre-load increases the displacement force by max. 10N.

Anodised surfaces

All drylin® N guide rails are anodised and are distinguished by good wear properties and corrosion resistance. All rail sizes are available as clear-anodised version (silver) as well as anti-reflect version with black-anodised surface. These are technical surfaces and not decorative. Slight crack formations and colour variations cannot be prevented during production, but they do not affect the resistance, the corrosion behaviour or the sliding properties. Cutting surfaces and machined surfaces are uncoated.

Tightening torque for drylin® connections between metal parts

Metric thread (Da)	Tightening torque [Nm]	Recommended tightening torque [Nm]
M3	0.5–1.1	0.7
M4	1.0–2.8	1.5
M5	2.0–5.5	3.0
M6	4.0–10.0	6.0
M8	8.0–23.0	15.0
M10	22.0–46.0	30.0

Please be aware of the minimal screw-in depth for aluminium and zinc die-casting parts: 1.5 x Da

System selection				
System	**N17**	**N27**	**N40**	**N80**
Rail width	17mm	27mm	40mm	80mm
Installation height	6mm	9.5mm	9.5mm	12mm
General properties				
Rail weight	150g/m	290g/m	450g/m	1,140g/m
Carriage weight	1.7g	9–12.5g	30g	100g
Max. rail length	2,000mm	3,000mm	3,000mm	4,000mm
Load capacity, static				
Fy	50N	500N	700N	1,000N
Fz	50N	500N	700N	1,000N
Mx	0.31Nm	5Nm	10Nm	32.4Nm
My, Mz	0.18Nm	2.5Nm	6Nm	15Nm
Carriage options				
Floating bearing in y-direction	●	●	●	●
Floating bearing in z-direction	●	●	●	●
Floating bearing in yz-direction	●	●	●	●
Pre-load (1N)	●	●	●	–
Overmoulded version	–	●	●	●
Carriage with through hole	–	●	●	–
Carriage with threaded pin	●	●	●	–
Carriage with threaded hole	–	–	–	●

Table 01: System selection ● available – not available

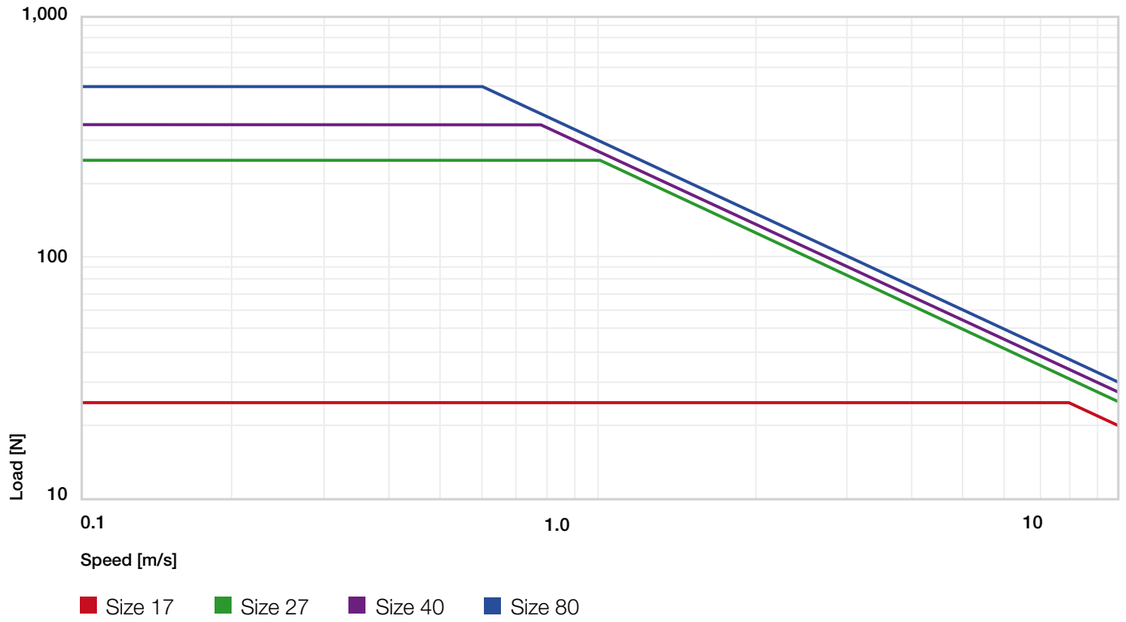


Diagram 01: F v diagram, maximum permissible dynamic load

drylin® N low-profile linear guides | Product range

Guide rails and carriages – installation size 17

Complete system

Order key

Type	Installation size	Options
NW - 22 -	17 -	30 - LLY

- drylin® N
- Guide carriage
- Type of carriage
- Rail width
- Carriage length
- Floating bearing in y-direction

Type of carriage:
- **02:** Carriage with threaded pin:
- **22:** Double carriage with threaded pin

Options:
- **P:** Pre-load

Floating bearing:
- **LLY:** y-direction (not possible with the "P" version)
- **LLZ:** z-direction
- **LLYZ:** yz-direction

Guide rail – dimensions [mm]

Part No.	L	a	C4	C5 C6		h	h1	K1[73]	Iy	Iz	Weight
	Max.			Min.	Max.				[mm⁴]	[mm⁴]	[g/m]
NS-01-17- □[72]	2,000	17	60	20	49.5	5.5	0.9	Ø3.5	1,700	120	150
NS-01-17-UNGEBOHRT- □[72]	2,000	17	–	–	–	5.5	0.9	–	1,700	120	150
NS-01-17-AR- □[72]	2,000	17	60	20	49.5	5.5	0.9	Ø3.5	1,700	120	150

Guide carriage – dimensions [mm]

Part No.	H ±0.35	A	C	C2	K3[74]	Sp	Dp[159]	Weight [g]
NW-02-17	6.0	9.6	20	14	M3	2.5	5.0	1.7
NW-02-17-P	6.0	9.6	20	14	M3	2.5	5.0	1.7
NW-22-17-30	6.0	9.6	30	18	M3	2.5	5.0	2.4
NW-22-17-40	6.0	9.6	40	28	M3	2.5	5.0	2.6

[72] Please give the required length in mm, symmetrical standard hole pattern C5=C6

[73] For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)

[74] Metal thread

[159] Hole min. Ø

All elements can be ordered individually or as assembled systems

NS-01-17-1500: Guide rail, installation size 17, 1,500mm length

NK-02-17-02-500-LLY: Complete system with two solid plastic guide carriages with threaded pins, installation size 17, floating bearing in y-direction and 500mm guide rails with standard holes

drylin® N low-profile linear guides

drylin® N low-profile linear guides | Product range

The linear guide for the smallest installation space

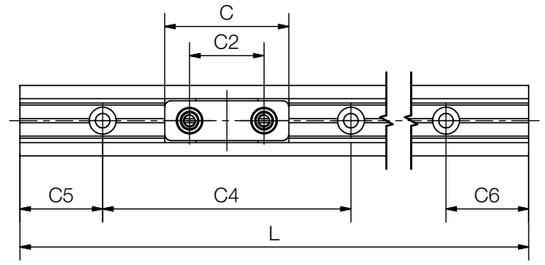
Standard | Without holes | Anti-reflect

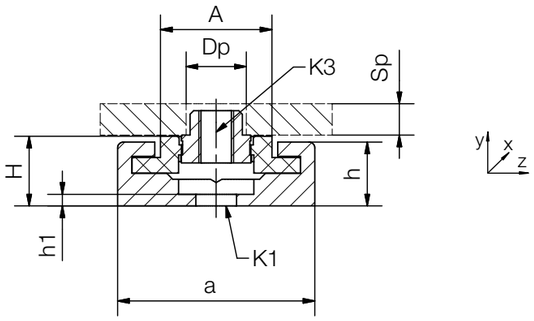
NW-02-17

NW-02-17-P

NW-22-17-30

NW-22-17-40





Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-02-17	●			●			●			
NW-02-17-P	●			●		●	●			
NW-22-17-30		●		●			●			
NW-22-17-40		●		●			●			

drylin® N low-profile linear guides | Product range

Guide rails and carriages – installation size 27

Complete system

Order key

Type	Size	Options

NW - 01 - 27 - HT - LLY

drylin® N	Guide carriage	Type of carriage	Rail width	High temperature	Floating bearing in y-direction

Type of carriage:
See selection aid
Options:
P: Pre-load
HT: High temperature
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail – dimensions [mm]

Part No.	L	a	C4	C5	C6	h	h1	K1[73]	Iy	Iz	Weight
	Max.			Min.	Max.				[mm⁴]	[mm⁴]	[g/m]
NS-01-27- ☐[72]	3,000	27	60	20	49.5	9	1.1	Ø4.5	6,524	588	290
NS-01-27-UNGEBOHRT- ☐[72]	3,000	27	–	–	–	9	1.1	–	6,524	588	290
NS-01-27-AR- ☐[72]	3,000	27	60	20	49.5	9	1.1	Ø4.5	6,524	588	290

Guide carriage – dimensions [mm]

Part No.	H	A	C	C1	C2	H2	K[73]	K3[74]	M[75]	Sp	Dp[159]	Weight
	±0.35								[Nm]			[g]
NW-01-27	9.5	14.0	40	30	20	1.2	Ø4.5	–	–	–	–	10.8
NW-11-27	9.5	14.0	34	30	20	1.2	Ø4.5	–	–	–	–	10.8
NW-01-27-P	9.5	14.0	40	30	20	1.2	Ø4.5	–	–	–	–	10.8
NW-01-27-HT	9.5	14.0	40	30	20	1.2	Ø4.5	–	–	–	–	11.0
NW-02-27	9.5	14.0	40	30	20	–	–	M4	1.2	5.0	6.5	12.5
NW-12-27	9.5	14.0	34	30	20	–	–	M4	1.2	5.0	6.5	12.5
NW-02-27-P	9.5	14.0	40	30	20	–	–	M4	1.2	5.0	6.5	12.5
NW-02-27-HT	9.5	14.0	40	30	20	–	–	M4	–	5.0	6.5	13.0
NW-21-27-60-P	9.5	14.0	60	60	20	0.7	Ø4.5	–	–	–	–	9.0
NW-22-27-60-P	9.5	14.0	60	60	20	–	–	M4	1.2	5.0	6.5	12.0
NW-31-27-60-P	9.5	14.0	60	60	40	0.7	–	M4	–	–	–	9
NW-32-27-60-P	9.5	14.0	60	60	40	–	–	M4	1.2	5	6.5	12
NW-11-27-80	9.5	14.0	80	76	60	1.2	Ø4.5	–	–	–	–	25.0
NW-12-27-80	9.5	14.0	80	76	60	–	–	M4	1.2	5.0	6.5	25.0

[72] Please give the required length in mm, symmetrical standard hole pattern C5=C6
[73] For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)
[74] Metal thread [75] Max. screw tightening torque [159] Hole min. Ø

All elements can be ordered individually or as assembled systems
NS-01-27-1500: Guide rail, installation size 27, 1,500mm length
NW-02-27-P-LLY: Guide carriage with threaded pin, installation size 27, pre-load, floating bearing in y-direction
NK-02-27-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 27, floating bearing in y-direction and 500mm guide rails with standard holes

drylin® N low-profile linear guides

drylin® N low-profile linear guides | Product range

The installation size with the largest variety of carriages

Standard

Without holes

Anti-reflect

NW-01-27

NW-02-27

NW-01-27-P

NW-02-27-P

NW-01-27-HT

NW-02-27-HT

NW-21-27-60-P

NW-22-27-60-P

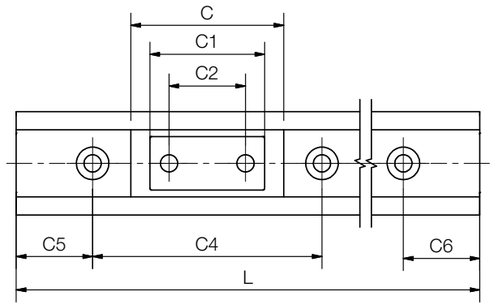
NW-11-27

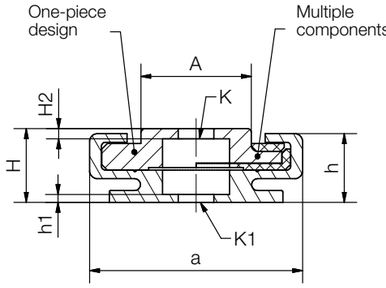
NW-12-27

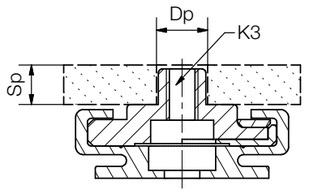
NW-32-27-60-P

NW-11-27-80

NW-12-27-80







Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-01-27	●		●					●		
NW-11-27	●		●						●	
NW-01-27-P	●		●			●		●		
NW-01-27-HT	●		●					●		●
NW-02-27	●			●				●		
NW-12-27	●			●					●	
NW-02-27-P	●			●		●		●		
NW-02-27-HT	●			●				●		●
NW-21-27-60-P	●		●			●	●			
NW-22-27-60-P	●			●		●	●			
NW-31-27-60-P	●		●			●	●			
NW-32-27-60-P	●			●		●	●			
NW-11-27-80		●	●						●	
NW-12-27-80		●		●					●	

drylin® N low-profile linear guides | Product range

Guide rails and carriages – installation size 40

Complete system

Order key

Type	Size	Options

NW - 01 - 40 - P - LLY

drylin® N	Guide carriage	Type of carriage	Rail width	Pre-load	Floating bearing in y-direction

Type of carriage:
See selection aid
Options:
P: Pre-load
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail – dimensions [mm]

Part No.	L Max.	a	C4	C5 C6 Min.	C5 C6 Max.	h	h1	K1[73]	Iy [mm⁴]	Iz [mm⁴]	Weight [g/m]
NS-01-40- □[72]	3,000	40	60	20	49.5	8.7	1.3	Ø4.5	26,400	970	450
NS-01-40-UNGEBOHRT- □[72]	3,000	40	–	–	–	8.7	1.3	–	26,400	970	450
NS-01-40-AR- □[72]	3,000	40	60	20	49.5	8.7	1.3	Ø4.5	26,400	970	450

Guide carriage – dimensions [mm]

Part No.	H ±0.35	A	C	C1	C2	H2	K[73]	K3[74]	Sp	Dp[159]	Weight [g]
NW-01-40	9.5	23.0	50	40	20	1.3	Ø4.5	–	–	–	30.0
NW-01-40-P	9.5	23.0	50	40	20	1.3	Ø4.5	–	–	–	30.0
NW-11-40	9.5	23.0	52	40	20	1.3	Ø4.5	–	–	–	30.0
NW-02-40	9.5	23.0	50	40	20	–	–	M4	5.0	6.5	30.0
NW-02-40-P	9.5	23.0	50	40	20	–	–	M4	5.0	6.5	30.0
NW-12-40	9.5	23.0	52	40	20	–	–	M4	5.0	6.5	30.0

[72] Please give the required length in mm, symmetrical standard hole pattern C5=C6
[73] For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)
[74] Metal thread
[159] Hole min. Ø

All elements can be ordered individually or as assembled systems
NS-01-40-1500: Guide rail, installation size 40, 1,500mm length
NW-02-40-P-LLY: Guide carriage with threaded pin, installation size 40, pre-load, floating bearing in y-direction
NK-02-40-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 40, floating bearing in y-direction and 500mm guide rails with standard holes

drylin® N low-profile linear guides

drylin® N low-profile linear guides | Product range

Suitable for aluminium construction profiles

Standard

Without holes

Anti-reflect

NW-01-40

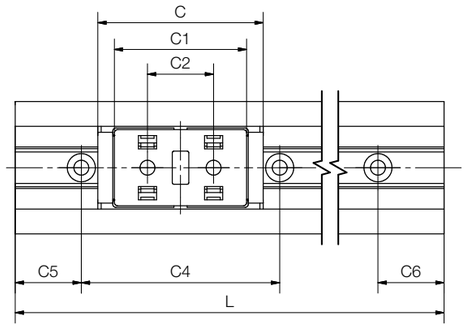
NW-02-40

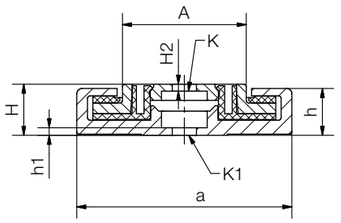
NW-01-40-P

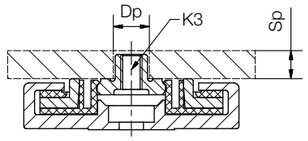
NW-02-40-P

NW-11-40

NW-12-40







Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-01-40	●		●					●		
NW-01-40-P	●		●			●		●		
NW-11-40	●		●						●	
NW-02-40	●			●				●		
NW-02-40-P	●			●		●		●		
NW-12-40	●			●					●	

drylin® N low-profile linear guides | Product range

Guide rails and carriages – installation size 80

Complete system

Order key

Type	Size	Options
NW -	02 -	80 - LLY

- drylin® N
- Guide carriage
- Type of carriage
- Rail width
- Floating bearing in y-direction

Type of carriage:
See selection aid
Options:
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail (standard/without holes/AR anti-reflect) – dimensions [mm]

Part No.	L	a	C4	A3	C5	C6	h	h1	K1[73]	Iy	Iz	Weight
	Max.				Min.	Max.				[mm⁴]	[mm⁴]	[g/m]
NS-01-80- □[72]	4,000	80	150	40	25	99.5	11	1.5	Ø4.5	27,120	2,900	1,140
NS-01-80-UNGEBOHRT- □[72]	4,000	80	–	–	–	–	11	1.5	–	27,120	2,900	1,140
NS-01-80-AR- □[72]	4,000	80	150	40	25	99.5	11	1.5	Ø4.5	27,120	2,900	1,140

Guide carriage – dimensions [mm]

Part No.	H	A	C	C1	C2	A2	K4[74]	Weight
	±0.35							[g]
NW-02-80	12.0	57.0	80	68	56	45	M4	100.0
NW-12-80	12.0	57.0	83	68	56	45	M4	146.3

[72] Please give the required length in mm, symmetrical standard hole pattern C5=C6
[73] For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)
[74] Metal thread

All elements can be ordered individually or as assembled systems
NS-01-80-1500: Guide rail, size 80, 1,500mm length
NW-02-80-LLY: Guide carriage, clip-on, installation size 80, floating bearing in y-direction,
NK-02-80-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 80, floating bearing in y-direction and 500mm guide rails with standard holes

drylin® N low-profile linear guides

drylin® N low-profile linear guides | Product range

For high speeds at low loads

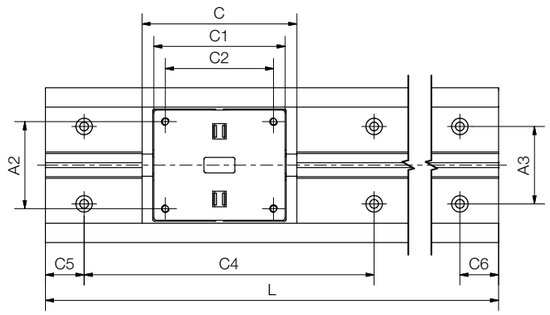
Standard

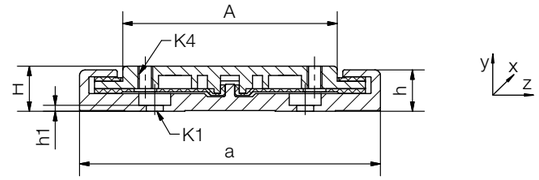
Without holes

Anti-reflect

NW-12-80

NW-02-80





Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-02-80	●				●			●		
NW-12-80	●				●				●	

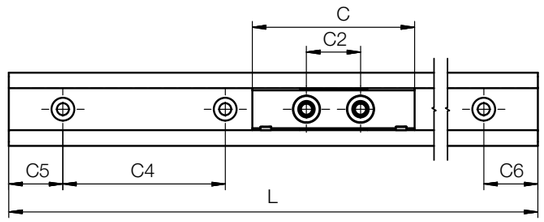
drylin® N low-profile linear guides | Product range

Prism rails

Order key

Type	Installation size	Options
NSV	01	27	AR	UNGEBOHRT

- Guide rail for pre-load prism slide
- Type
- Installation size
- Anti-reflect



Guide rail – dimensions [mm]

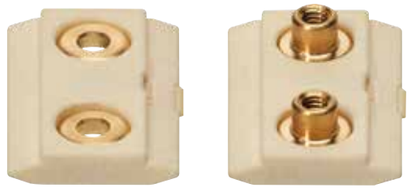
Part No.		L	a	C4	C5	C6	h	h1	K1	Iy	Iz	Weight
		Max.			Min.	Max.				[mm⁴]	[mm⁴]	[g/m]
NSV-01-27		3,000	27	60	20	49.5	8.8	1.1	Ø4.5	11,250	766	409
NSV-01-27-AR	New	3,000	27	60	20	49.5	8.8	1.1	Ø4.5	11,250	766	409
NSV-01-27-□[72)]		3,000	27	–	–	–	8.8	1.1	–	11,250	766	409
NSV-01-27-□-AR[72)]	New	3,000	27	–	–	–	8.8	1.1	–	11,250	766	409

[72)] Please give the required length in mm, symmetrical standard hole pattern C5=C6

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

drylin® N low-profile linear guides | Product range

Short prism carriage with single pre-load

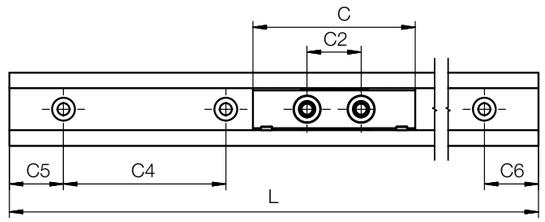


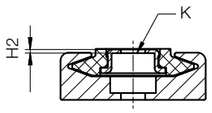
With threaded pin 22 or with through hole 21

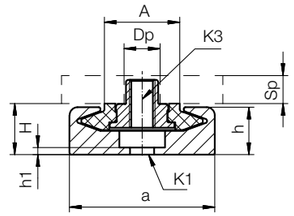
Order key

Type	Installation size	Options
NWV	21	27	35	P05

- Pre-load prism slide
- Type of carriage
- Rail width
- Carriage length
- Pre-load







Guide carriage – dimensions [mm]

Part No.		Pre-load	H	A	C	C2	H2	K	K3	M[75)]	SP	Dp[159)]	Weight
											Min.		
		[N]	±0.35							[Nm]			[g]
NWV-21-27-35-P05		0.5	9.5	14	35	20	0.7	Ø4.5	–	–	–	–	6
NWV-21-27-35-P11		1.1	9.5	14	35	20	0.7	Ø4.5	–	–	–	–	6
NWV-21-27-35-P23		2.3	9.5	14	35	20	0.7	Ø4.5	–	–	–	–	6
NWV-21-27-35-P38		3.8	9.5	14	35	20	0.7	Ø4.5	–	–	–	–	6
NWV-21-27-35-P80	New	8.0	9.5	14	35	20	0.7	Ø4.5	–	–	–	–	6
NWV-22-27-35-P05		0.5	9.5	14	35	20	–	–	M4	1.2	5	6.5	11
NWV-22-27-35-P11		1.1	9.5	14	35	20	–	–	M4	1.2	5	6.5	11
NWV-22-27-35-P23		2.3	9.5	14	35	20	–	–	M4	1.2	5	6.5	11
NWV-22-27-35-P38		3.8	9.5	14	35	20	–	–	M4	1.2	5	6.5	11
NWV-22-27-35-P80	New	8.0	9.5	14	35	20	–	–	M4	1.2	5	6.5	11

[75)] Max. screw tightening torque

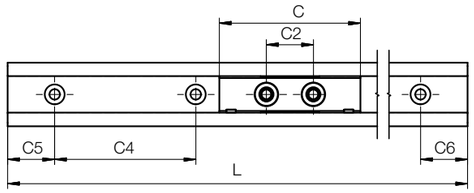
[159)] Hole min. Ø

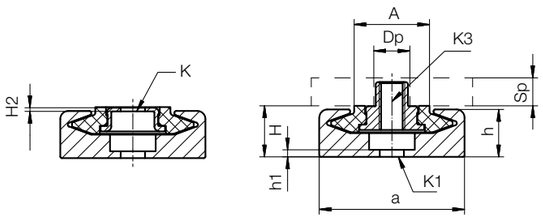
drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

drylin® N low-profile linear guides | Product range

Long prism carriage with dual pre-load

With threaded pin 22 or with through hole 21





Order key

Type	Installation size	Options

NWV - 21 - 27 - 60 - P10

Pre-load prism slide	Type of carriage	Rail width	Carriage length	Pre-load

Guide carriage – dimensions [mm]

Part No.	Pre-load	H	A	C	C2	H2	K	K3	M[75)]	SP Min.	Dp[159)]	Weight
	[N]	±0.35							[Nm]			[g]
NWV-21-27-60-P10	1.0	9.5	14	60	20	0.7	Ø4.5	–	–	–	–	10
NWV-21-27-60-P22	2.2	9.5	14	60	20	0.7	Ø4.5	–	–	–	–	10
NWV-21-27-60-P46	4.6	9.5	14	60	20	0.7	Ø4.5	–	–	–	–	10
NWV-21-27-60-P76	7.6	9.5	14	60	20	0.7	Ø4.5	–	–	–	–	10
NWV-21-27-60-P160 New	16.0	9.5	14	60	20	0.7	Ø4.5	–	–	–	–	6
NWV-22-27-60-P10	1.0	9.5	14	60	20	–	–	M4	1.2	5	6.5	13
NWV-22-27-60-P22	2.2	9.5	14	60	20	–	–	M4	1.2	5	6.5	13
NWV-22-27-60-P46	4.6	9.5	14	60	20	–	–	M4	1.2	5	6.5	13
NWV-22-27-60-P76	7.6	9.5	14	60	20	–	–	M4	1.2	5	6.5	13
NWV-22-27-60-P160 New	16.0	9.5	14	60	20	–	–	M4	1.2	5	6.5	11

[75)] Max. screw tightening torque

[159)] Hole min. Ø

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

drylin® N low-profile linear guides | Technical data

Standard carriages

Part No.	Average displacement force [N]
NWV-21/22-27-35-P05	1.0
NWV-21/22-27-35-P11	2.2
NWV-21/22-27-35-P23	4.6
NWV-21/22-27-35-P38	7.6
NWV-21/22-27-35-P80	16.0

Part No.	Guaranteed holding force [N]
NWV-21/22-27-35-P05	0.5
NWV-21/22-27-35-P11	1.1
NWV-21/22-27-35-P23	2.3
NWV-21/22-27-35-P38	3.8
NWV-21/22-27-35-P80	8.0

Long carriages

Part No.	Average displacement force [N]
NWV-21/22-27-60-P10	2.0
NWV-21/22-27-60-P22	4.4
NWV-21/22-27-60-P46	9.2
NWV-21/22-27-60-P76	15.2
NWV-21/22-27-60-P160	32.0

Part No.	Guaranteed holding force [N]
NWV-21/22-27-60-P10	1.0
NWV-21/22-27-60-P22	2.2
NWV-21/22-27-60-P46	4.6
NWV-21/22-27-60-P76	7.6
NWV-21/22-27-60-P160	16.0

Note:
The average displacement force values apply to unloaded carriages at centric drive. The real displacement forces depend to a large extent on the displacement speed. At creep movement (few mm/min.), the values are slightly over the guaranteed holding force. At higher displacement forces, the values can considerably exceed the average displacement force. The values do not apply for applications in which dirt and moisture ingress into the system. The holding force cited is a minimum value – the displacement force required to move the carriage may be higher

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

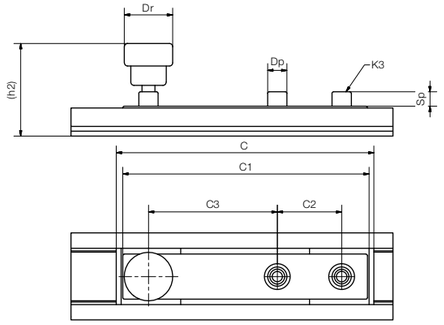
drylin® N low-profile linear guides | Product range

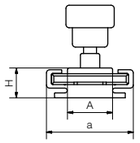
Accessories: Manual clamp

Order key

Type	Size	Version
NW - 12 - 27 - 80 - HKA		

drylin® N	Guide carriage	Type of carriage	Rail width	Carriage length	Manual clamp





Dimensions [mm]

Part No.	H	(h2)	A	a	C	C1	C2	C3	K3	M [Nm]	Sp	Dp	Dr	Weight [g]
NW-12-27-80-HKA	9.5	32	14	27	80	76	20	40	M4	1.2	5	6.5	15	32

M: Permissible torque of the complete system

Order example:
NW-12-27-80-HKA: Manual clamp for NW-12-27-80 carriage

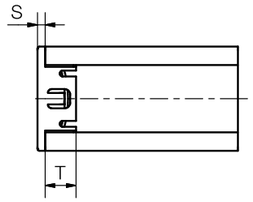
drylin® N low-profile linear guides | Product range

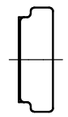
Accessories: End caps

Order key

Type	Size
N S K B - 40	

drylin® N – end cap	Push-fit	Rail width





Dimensions [mm]

Part No.	S	T	For rail
NSKB-17	1.5	7	NS-01-17
NSKB-27	2.0	8	NS-01-27
NSK-40	1.5	8	NS-01-40
NSKB-80	2.0	17	NS-01-80

Order example:
NSK-40: End caps for guide rail size 40, bolted

Easily assembled and disassembled by hand using a screwdriver. Part No.: NSKB

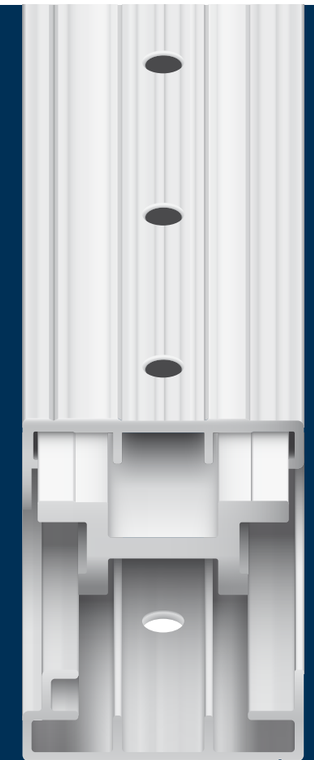
End caps for rail size 40, screwed
Part No.: NSK-40

drylin® N low-profile linear guides | Ordering options

drylin® N replacement plastic sliders (set)

Material iglidur® J

Carriage type	Part No. Sliding part set
NW-01/02/27	NEK-01-27
NW-01/02-27P	NEK-01-27-P
NW-01/02-27-LLY	NEK-01-27-LLY
NW-01/02-27-LLZ	NEK-01-27-LLZ
NW-01/02-40	NEK-02-40
NW-01/02-40P	NEK-01-40-P
NW-01/02-40-LLY	NEK-02-40-LLY
NW-01/02-40-LLZ	NEK-02-40-LLZ
NW-02-80	NEK-02-80
NW-02-80-LLY	NEK-02-80-LLY
NW-02-80-LLZ	NEK-02-80-LLZ



drylin® linear technology – drylin® N telescopic rails

- Continuously extendable
- Lubrication-free dry-tech® sliding elements
- Quiet, sliding movement
- Full extension, partial extension, overextension

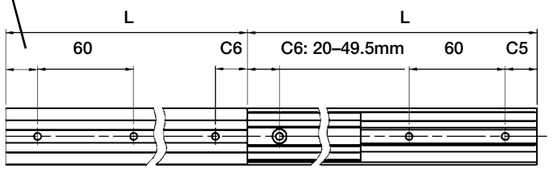
drylin® N low-profile linear guides | Product range

Telescopic rails

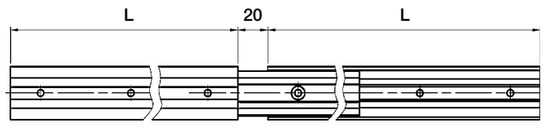
- Robust plastic/aluminium version
- Lightweight
- Cost-effective
- Corrosion-free
- Continuous lengths up to 1,200mm (total extension)

NT-35-"L" – Total extension

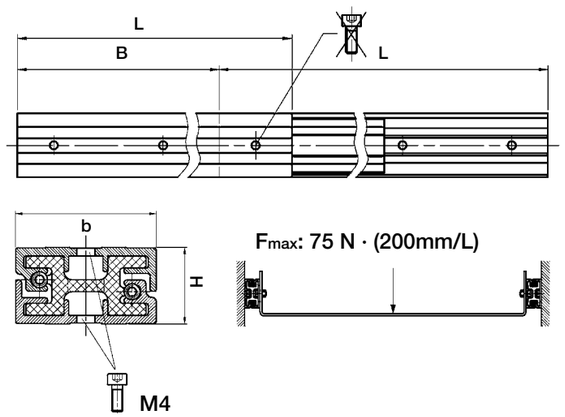
C5: 20–49.5mm



NT-35-"L"-"L+20" – overextension



NT-35-"L"-"B" – Partial extension



Order key

Type	Size		
N T	- 35	- 300	
drylin® N	Telescopic system	Rail width	Length [mm]

Order key overextension

Type	Size	Option	
N T	- 35	- 300	- 320
drylin® N	Telescopic system	Rail width	Length [mm]	Overextension [mm]

Order key partial extension

Type	Size	Option	
N T	- 35	- 300	- 200
drylin® N	Telescopic system	Rail width	Length [mm]	Partial extension [mm]

Option:
Partial extension
(example: compressed length 300mm, extended length 500mm)

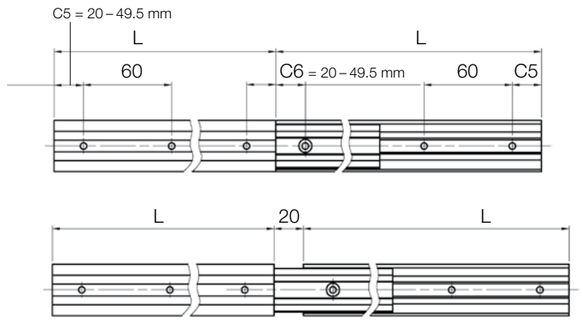
Tip:
F_{max} calculated using this formula allows an easy manual use. Higher loads can be taken up by the system, but need a higher drive force.

Dimensions [mm]

Part No.	b	H	C4	C5 = C6		L	
				Min.	Max.	Min.	Max.
NT-35-... mm	35	19	60	20	49.5	100	600

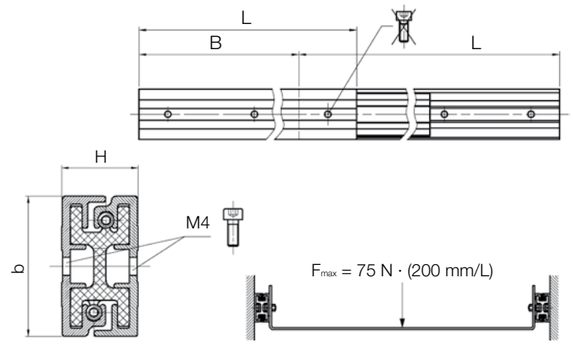
drylin® N low-profile linear guides | Product range

Telescopic rails with locking mechanism



Order key

Type	Size	Option		
N T	- LM -	35	- 300	
drylin® N	Telescopic system	Locking mechanism	Rail width	Length [mm]



drylin® NT LM in adjustment of Perspex guard

drylin® NT LM in guard door adjustment in a machine tool

drylin® detent in end and centre position at full extension – dimensions [mm]

Part No.	b	H	Lmin	Lmax.
NT-LM-35-...mm	35	19	140	600

Individual position detent upon request; The length divided by the locking distance must be an even number.
e.g. Length 250mm, latching in 62.5mm step: 250/62.5 = 4

Order example:
NT-LM-35-300: drylin® N telescopic rail with locking mechanism, 35mm width, retracted length 300mm

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

drylin® N low-profile linear guides | Product range New

Telescopic guide for higher loads

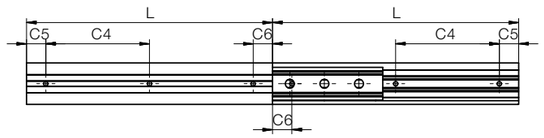
- Lubrication and maintenance-free
- Continuously extendable up to 2,000mm (extended length)
- Sliders made of durable high-performance polymers
- Quiet, sliding movement
- Full extension, partial extension and overextension possible

Order key

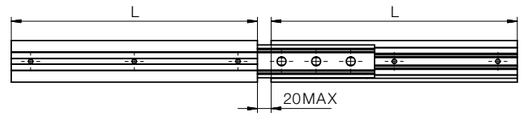
Type	Size
N T	- 60 - 200

drylin® N	Telescopic system	Rail width	Length [mm]

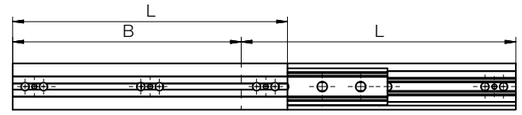
NT-60-"L" – Total extension

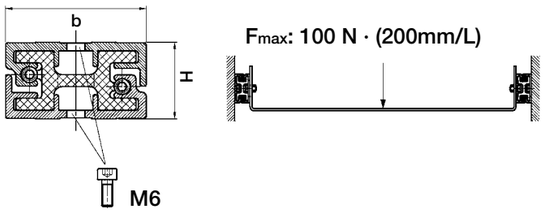


NT-60-"L"-"L+max. 20" – overextension

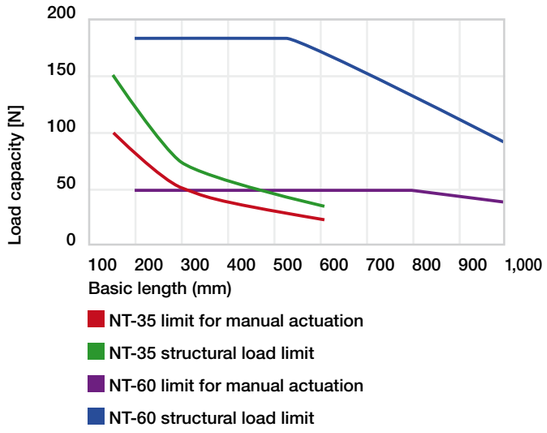


NT-60-"L"-"B" – Partial extension

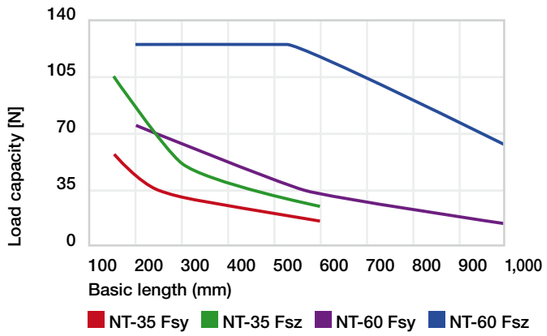




Tip:
F_{max} calculated using this formula allows an easy manual use. Higher loads can be taken up by the system, but need a higher drive force.



drylin® N telescope systems load capacity of a drawer with two systems installed upright



drylin® N telescope static load capacity in different load directions

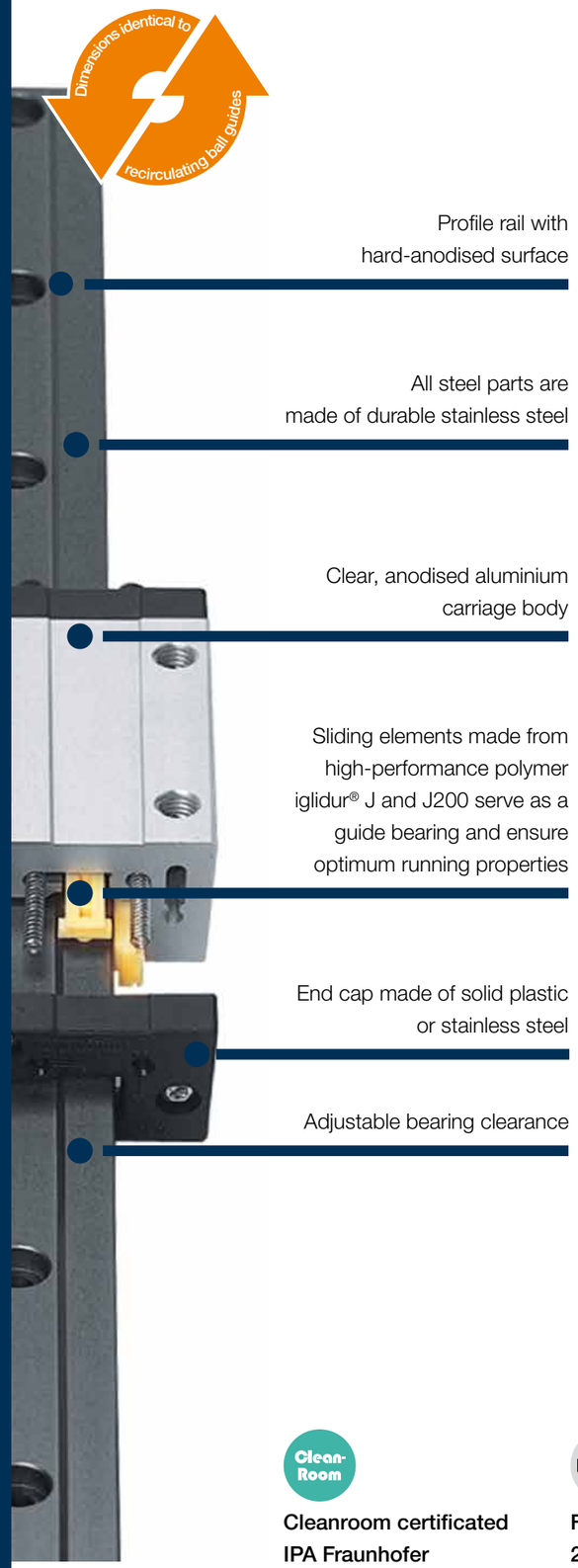
Dimensions [mm]

Part No.	b	H	C4	C5 = C6		L	
				Min.	Max.	Min.	Max.
NT-60-... mm New	60	24	150	25	99.5	200	1,000

drylin® linear technology – drylin® T rail guides

- Robust linear guides
- Adjustable bearing clearance
- Wear-resistant and durable
- Dimensionally identical to recirculating ball-bearing guides
- Lubrication and maintenance-free

Resistant to dirt, low vibration, quiet, long service life



Lubrication-free rail guides – drylin® T

drylin® T rail guides were originally developed for applications in both automation and materials handling. The goal was to create a robust linear guide for use in the most diverse, even extreme environments. Their dimensions are identical to most recirculating ball bearing guides.

- 100% lubrication-free
- Adjustable bearing clearance
- Automatic clearance adjustment
- High static load capacity
- Service life up to 50,000km
- Resistant to dirt
- Low vibration and quiet

Typical application areas

- Mechanical engineering
- Wood working industry
- Machine tools
- Handling

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +90°C
Min. –40°C

7 carriage types
Rail length up to 4,000mm

Service life calculation
▶ www.igus.eu/drylin-expert

Cleanroom certificated
IPA Fraunhofer

Free from toxins
2011/65/EU (RoHS)

ESD-compatible
(electrostatic discharge)

Dimensionally identical to most recirculating ball-bearing guides

High performance

- 50% longer service life due to iglidur® J200 sliding elements
- Fast assembly
- Adjustable bearing clearance

▶ From page 1061

Standard / with manual clamp

- Manual clearance adjustment on the carriage
- Long service life with iglidur® J sliding elements
- Manual clamp on carriage (optional)

▶ From page 1062

Automatic

- Automatic clearance adjustment
- Easy assembly with pre-load key
- Long service life with iglidur® J sliding elements

▶ Page 1063

Heavy duty

- Robust design, factory clearance adjustment
- Long service life with iglidur® J sliding elements
- Quick assembly

▶ Page 1065

Compact

- Narrow guide carriages for small spaces
- Captive plastic sliders
- Corrosion-free

▶ Page 1066

Miniature guides / Adjustable miniature guides

- Small compact design
- Easy to fit
- Individual clearance adjustment on carriage

▶ Page 1068

Clamps

- Compact or heavy duty design
- Available for installation sizes 15 – 30mm
- Holding force up to 500N

▶ Page 1067

drylin® T rails

- Lightweight, aluminium extruded section
- Robust and corrosion-resistant hard-anodised surfaces
- Shaft length delivered with millimetre precision up to max. 4,000mm

▶ Page 1060

Based on drylin® T
drylin® SLT linear module

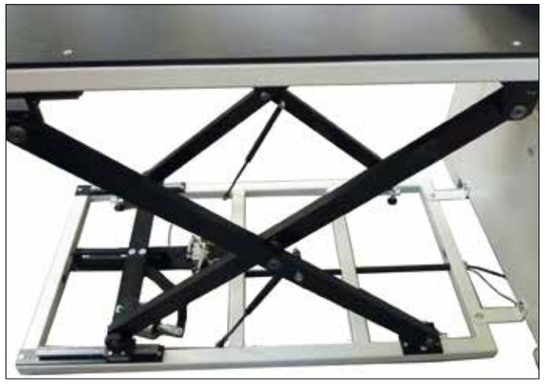
▶ From Page 1413

Long service life and food grade quality are also prerequisites for the application like insensitivity to pungent detergents and humidity.

The adjustment of the pressing roller and the compensation of the imbalance of the grinding tools are implemented with drylin® T in place of recirculating ball bearing guides.

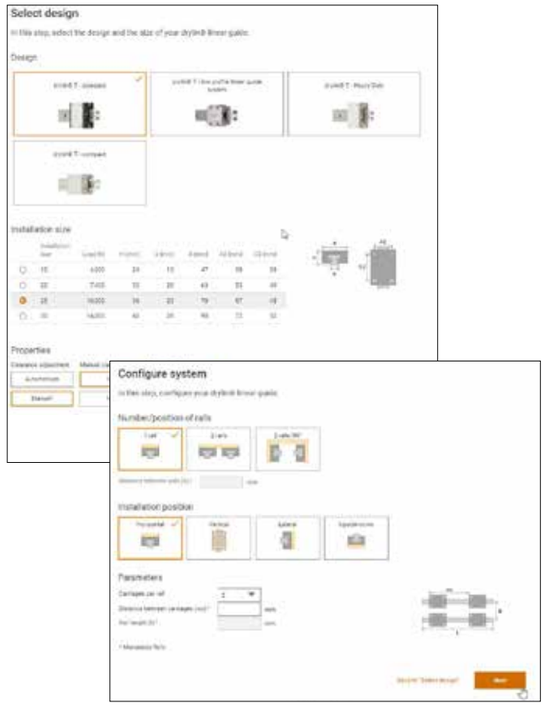
The drylin® T linear guides are used in these enveloping machines to guide an envelope suction opener that is mounted on one side.

Due to the welding spatter and dust, the use of the extremely dirt-resistant drylin® T linear guide finds the balance between high service life and low costs.



drylin® T rail guides with adjustable clearance change the height of the work table silently and precisely.

Time saving: Reduced tool changing time due to this measuring system. The gauge is guided on a drylin® T rail. This solution works also without problems in dusty environments.

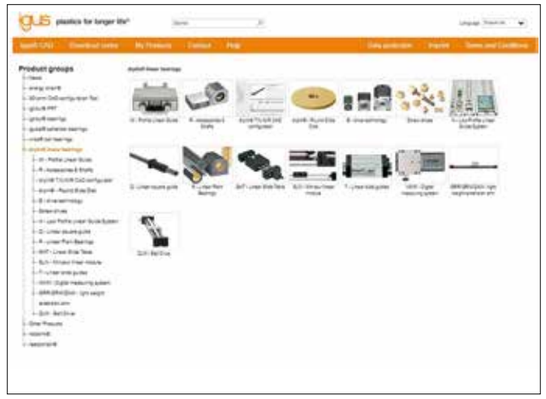


Expert for linear guides: System selection and service life calculation with CAD

Configure linear bearings and calculate their service life – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define the coordinates for the drive location and the centre of gravity, or enter these via the keyboard. Define the weight, acceleration, and distance of the bearing and select a rail length. The results are displayed.

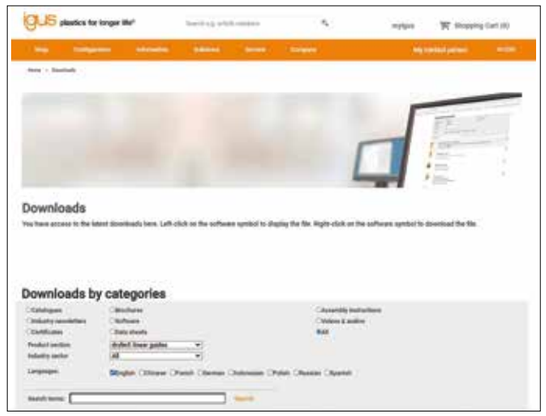
▶ **www.igus.eu/drylin-expert**



drylin® CAD configurator: Generate complete 3D models for drylin® linear technology according to your specifications

The igus® CAD online configurator gives you the ability to design and save your linear guide as a system, individual components directly as a 3D model in all commonly used formats, or to have these sent by e-mail – free of charge and without registration.

▶ **www.igus.eu/drylin-CAD**



More information about the products can be found in the igus® download area

- Assembly instructions
- Assembly videos
- System design
- Catalogues

▶ **www.igus.eu/downloads**

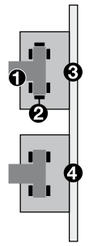
Design tip

The compensation of parallelism errors up to a maximum of 0.5mm between mounted rails is possible with a fixed/floating bearing. During installation, take care that the floating bearing has approximately the same clearance on both sides.
In the adjacent designs you can see the version of the fixed/floating bearing system recommended by us.
The mounting surfaces of the rails and guide carriages should be very flat (e.g. machined surface) to prevent twisting in the system. Small discrepancies in the mounting surfaces can be compensated up to a certain amount (0.5mm) by a greater clearance adjustment. The clearance adjustment is possible only in unloaded state. If you have any questions on design and/or assembly, please make use of our technical support.

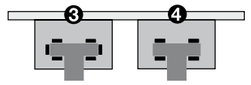
Technical details on floating bearings ▶ Page 963
The 2:1 Rule ▶ Page 963

Version with floating bearing in z-direction

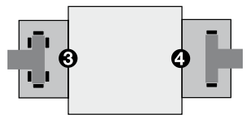
❶ Rail
❷ Slide elements
❸ Carriage with fixed bearings
❹ Carriage with floating bearings
LLZ or LLY



Horizontal version with floating bearing in z-direction



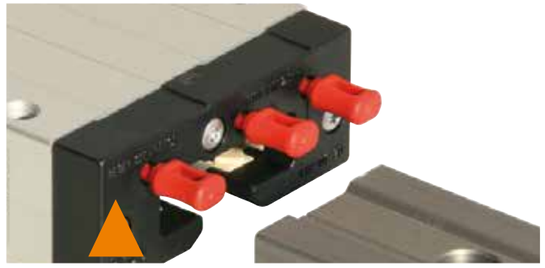
Horizontal version with floating bearing in the y-direction and lateral guide carriage



Installation drylin® T linear guide system

Make sure to assemble the side of the carriage saying "Reset Clearance" onto the rail first (see picture).

TW series, adjustable clearance



TWA series, automatic

Tightening torque for drylin® connections between metal parts

Metric thread (Da)	Torque [Nm]	Recommended tightening torque [Nm]
M3	0.5–1.1	0.7
M4	1.0–2.8	1.5
M5	2.0–5.5	3.0
M6	4.0–10.0	6.0
M8	8.0–23.0	15.0
M10	22.0–46.0	30.0

Minimal screw-in depth for aluminium and zinc die-casting parts: 1.5 x Da

Floating bearing clearances for drylin® T miniature guides

LLZ: Floating bearing in z-direction
LLY: Floating bearing in y-direction

Floating bearing clearances	TW-04-07	TW-04-09	TW-04-12	TW-04-15
LLY	–	0.4	0.5	0.7
LLZ	0.4	0.4	0.5	0.7

Guide rail	
Material	Aluminium, extruded section
Material	EN AW-6060 T66
Coating	Hard-anodised aluminium, 50 µm
Hardness	500 HV
Guide carriages	
Base structure	Aluminium, extruded section
Material	EN AW-6060 T66
Coating	Anodised aluminium
Sliding elements	Maintenance-free plain bearings materials iglidur® J, iglidur® J200 (TW-12/TW-04-07)
Bolts, springs	Stainless steel
End cap	Plastic (TW-01/TWA-01), steel (TW-02)/TW-03/TW-12
Max. surface speed	5m/s
Temperature range	from –40°C to +90°C

Table 01: drylin® – technical data

Type	C_{0Y} [kN]	$C_{0(-Y)}$ [kN]	C_{0Z} [kN]	M_{0X} [Nm]	M_{0Y} [Nm]	M_{0Z} [Nm]
04-07	0.2	0.2	0.1	1.2	0.6	0.6
04-09	0.48	0.48	0.24	3.4	1.8	1.8
04-12	0.96	0.96	0.48	9.2	4.4	4.4
04-12 (TWE)	0.48	0.48	0.24	4.6	2.2	2.2
04-15	1.4	1.4	0.7	17	8	8
04-15 (TWE)	0.7	0.7	0.35	8.5	4	4
01-/12-15	4	4	2	32	25	25
01-/02-/12-20	7.4	7.4	3.7	85	45	45
01-/02-/03-/12-25	10	10	5	125	65	65
01-/02-/12-30	14	14	7	200	100	100

Table 02: drylin® – permissible static load capacity

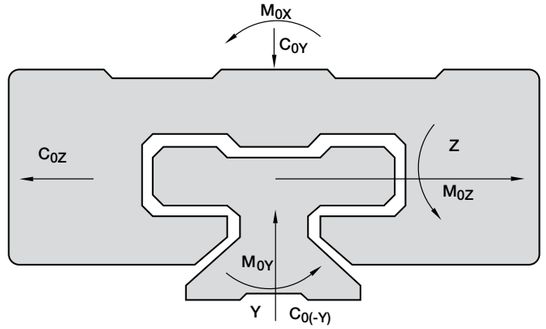


Diagram 01: Marking of the directions

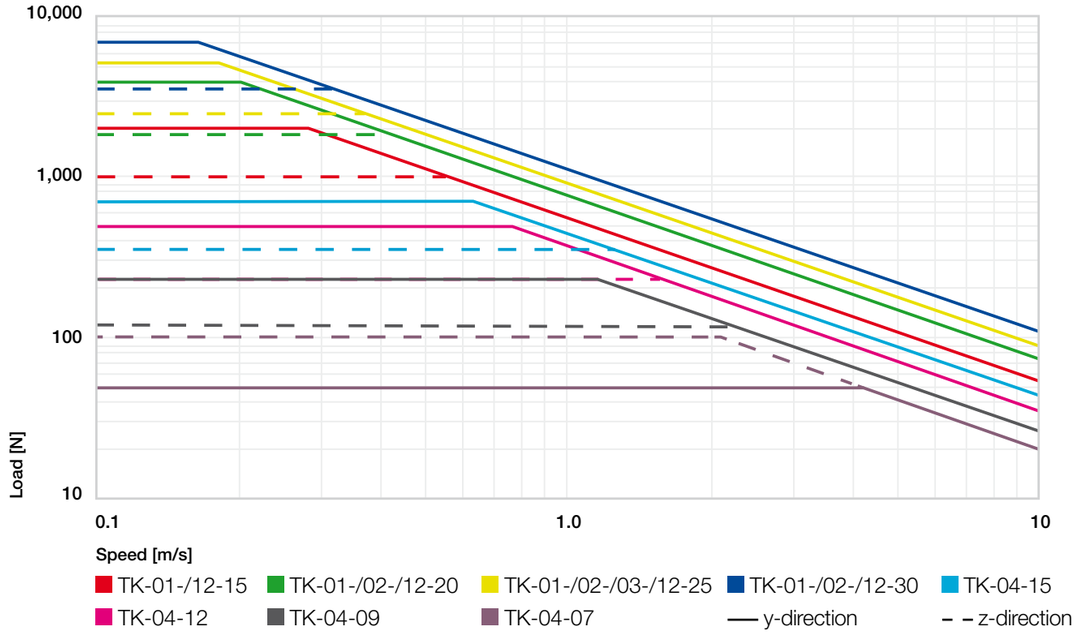


Diagram 02: drylin® T– permissible dynamic load capacity

drylin® T rail guides | Product range

Guide rails

TS-01

TS-11

Order key

Type	Options
TS-01-15-1000	

Guide rail | Standard | Installation size | Rail length [mm]

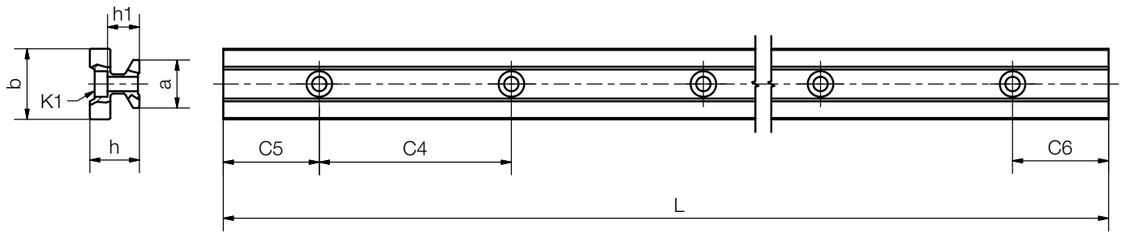
Curved rail profiles
▶ Page 962

Options:

TS-01: Standard rail, hard-anodised

TS-11: Weight-reduced rail, clear-anodised

Hard-anodised surfaces
▶ Page 958



Dimensions [mm]

Part No.	Weight	L	a	C4	C5	C5	C6	C6	h	h1	K1 for screw	b	Iy	Iz	Wby	Wbz
		Max.	–0.2		Min.	Max.	Min.	Max.								
	[kg/m]										DIN 912		[mm⁴]	[mm⁴]	[mm³]	[mm³]
TS-01-15	0.6	4,000	15	60	20	49.5	20	49.5	15.5	10.0	M4	22	6,440	4,290	585	488
TS-01-20	1.0	4,000	20	60	20	49.5	20	49.5	19.0	12.3	M5	31	22,570	11,520	1,456	1,067
TS-11-20	0.5	4,000	20	120	20	79.5	20	79.5	19.0	12.3	M5	31	12,140	6,360	780	620
TS-01-25	1.3	4,000	23	60	20	49.5	20	49.5	21.5	13.8	M6	34	34,700	19,300	2,041	1,608
TS-01-30	1.9	4,000	28	80	20	59.5	20	59.5	26.0	15.8	M8	40	70,040	40,780	3,502	2,832

Standard hole pattern symmetric C5 = C6

For rails without mounting holes, please use part number suffix "UNGEBOHRT"

Can be combined with:

TW-01-...

TWA-01-...

TW-01-HKA

TW-02-...

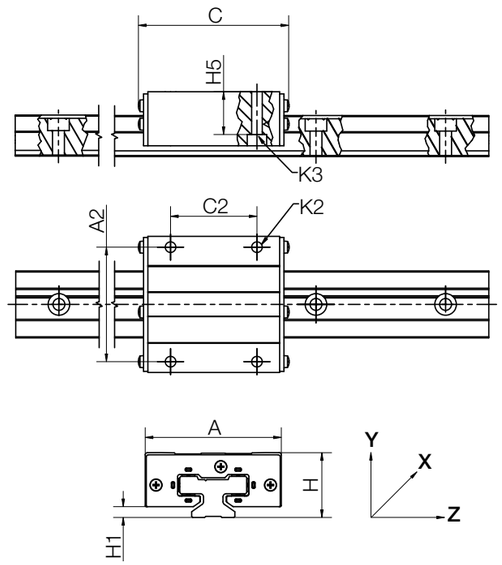
TW-03-...

Technical data
▶ Page 1059

drylin® T rail guides

drylin® T rail guides | Product range

High performance carriage with clearance adjustment



Order key

Type
TW-12-15

Guide carriage | High performance | Installation size

Dimensions [mm]

Part No.	Weight	H	H5	A	C	A2	C2	H1	K2	K3 for	Sliding
		±0.35						±0.35	thread	cap screw	elements
	[kg]										
TW-12-15	0.11	24	16.0	47	63	38	30	4.0	M5	M4	iglidur® J200
TW-12-20	0.19	30	19.8	63	72	53	40	5.0	M6	M5	iglidur® J200
TW-12-25	0.29	36	24.8	70	82	57	45	5.0	M8	M6	iglidur® J200
TW-12-30	0.50	42	27.0	90	94	72	52	6.5	M10	M8	iglidur® J200

Can only be combined with:

TS-01-20

TS-11-20

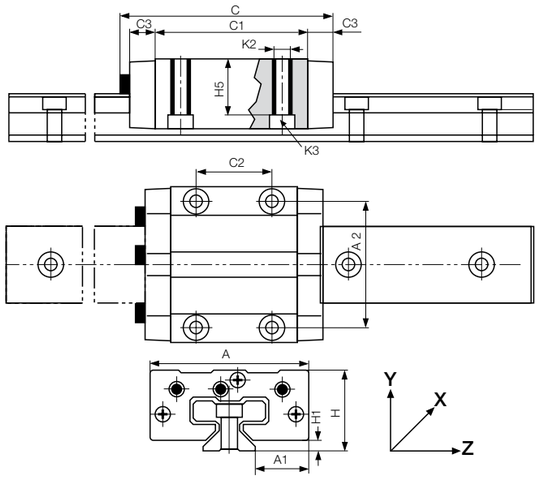
Technical data
▶ Page 1059

drylin® T rail guides | Product range

Guide carriage – manual clearance adjustment

TW-01

Complete system online



Order key

Type

TW-01-15

Guide carriage	Standard	Installation size

Options:

LLY: Floating bearing in y-direction

LLZ: Floating bearing in z-direction

Dimensions [mm]

Part No.	Weight [kg]	H ±0.35	A	C	A1 ±0.35	A2	C1	C2	C3	H1 ±0.35	H5	K2 thread	Tightening torque Max. [Nm]	K3 for screw DIN 912
TW-01-15	0.11	24	47	74	16.0	38	50	30	9	4.0	16.0	M5	1.5	M4
TW-01-20	0.19	30	63	87	21.5	53	61	40	10	5.0	19.8	M6	2.5	M5
TW-01-25	0.29	36	70	96	23.5	57	68	45	11	5.0	24.8	M8	6.0	M6
TW-01-30	0.50	42	90	109	31.0	72	79	52	12	6.5	27.0	M10	15.0	M8

All elements can be ordered individually or as assembled systems

TW-01-20-LLY: Standard guide carriage with manually adjustable clearance, installation size 20 and floating bearing in y-direction

TK-01-20-2-500: Complete system with two standard guide carriages type 01, installation size 20 and standard guide rail, 500mm length

Can be combined with:

TS-01-...

Technical data
▶ Page 1059

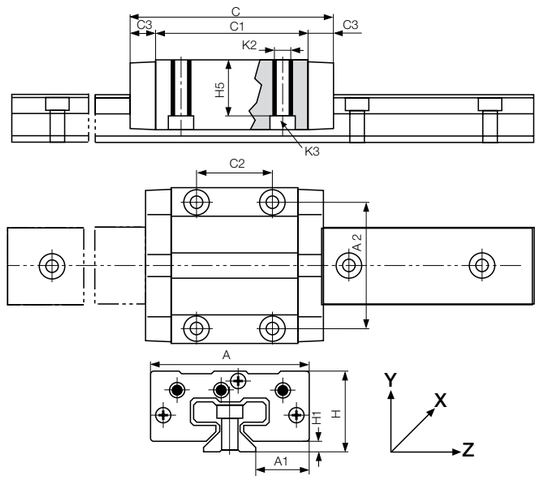
drylin® T rail guides

drylin® T rail guides | Product range

Guide carriages – automatic clearance adjustment

TWA-01

Complete system online



Order key

Type

TWA-01-15

Guide carriage Automatic version	Standard	Installation size

Options:

LLY: Floating bearing in y-direction

LLZ: Floating bearing in z-direction

Dimensions [mm]

Part No.	Weight [kg]	H ±0.35	A	C	A1 ±0.35	A2	C1	C2	C3	H1 ±0.35	H5	K2 Thread	Tightening torque Max. [Nm]	K3 for screw DIN 912
TWA-01-15	0.11	24	47	68	16.0	38	50	30	9	4.0	16.0	M5	1.5	M4
TWA-01-20	0.19	30	63	81	21.5	53	61	40	10	5.0	19.8	M6	2.5	M5
TWA-01-25	0.29	36	70	90	23.5	57	68	45	11	5.0	24.8	M8	6.0	M6
TWA-01-30	0.50	42	90	103	31.0	72	79	52	12	6.5	27.0	M10	15.0	M8

All elements can be ordered individually or as assembled systems

TW-01-20-LLY: Guide carriage with automatic clearance adjustment, installation size 20 and floating bearing in y-direction

TKA-01-20-2-500: Complete system with two standard guide carriages type 01, automatic clearance adjustment, installation size 20 and standard guide rail, 500mm length

Can be combined with:

TS-01-...

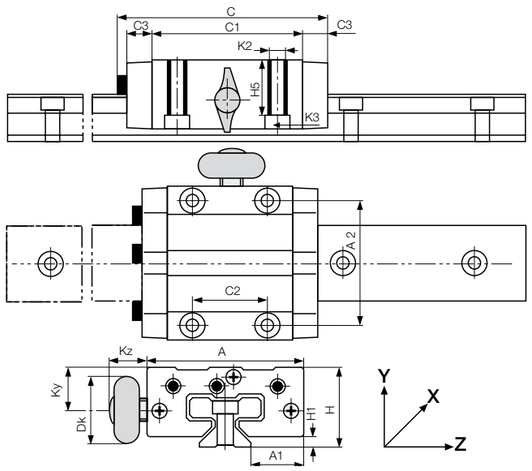
Technical data
▶ Page 1059

drylin® T rail guides | Product range

Guide carriage – with manual clamp

TW-01-HKA

Complete system online



Order key

Type	Options

TW-01-15-HKA

Guide carriage	Standard	Installation size	Manual clamp

Other dimensions as standard design
TW-01-... ▶ Page 1063

Dimensions [mm]

Part No.	Size	Kz	Ky	Dk	Manual clamp thread
TW-01-15-HKA	15	19.0	11.5	20.0	M6
TW-01-20-HKA	20	18.0	15.0	28.0	M8
TW-01-25-HKA	25	17.0	19.0	28.0	M8
TW-01-30-HKA	30	20.0	21.5	28.0	M8

All elements can be ordered individually or as assembled systems
TW-01-20-HKA: Guide carriage with manually adjustable clearance, installation size 20 and manual clamp
TK-01-20-HKA-2-500: Complete system with two standard guide carriages type 01 with manual clamp, installation size 20 and standard guide rail, 500mm length

The manual clamp thread was developed for simple tasks. The creep behaviour of the clamped plastic causes a reduction in clamping force over time (up to 70%). Therefore no safety-relevant parts may be clamped. Please contact our technical consultant, if you require other options for the clamping.

Can be combined with:

TS-01-...

Technical data
▶ Page 1059

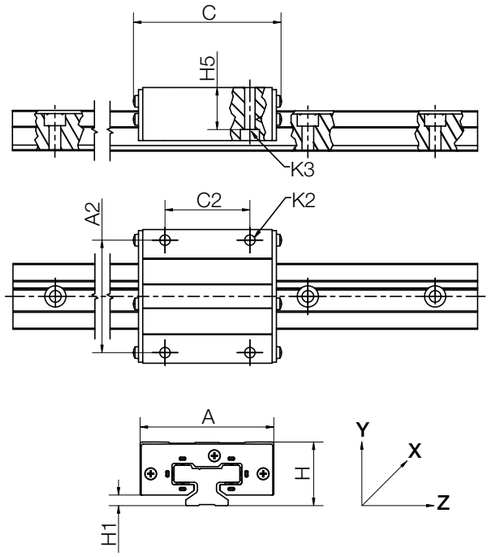
drylin® T rail guides

drylin® T rail guides | Product range

Guide carriage – heavy duty for extreme conditions

TW-02

Complete system online



Order key

Type

TW-02-20

Guide carriage	Heavy duty	Installation size

Floating bearing upon request

Dimensions [mm]

Part No.	Weight [kg]	H ±0.35	H5	A	C	A2	C2	H1 ±0.35	K2	K3
TW-02-20	0.19	30	19.8	63	70	53	40	5.0	M6	M5
TW-02-25	0.29	36	24.8	70	77	57	45	5.0	M8	M6
TW-02-30	0.50	42	27.0	90	92	72	52	6.5	M10	M8

All elements can be ordered individually or as assembled systems
TW-02-20: Heavy duty guide carriage, installation size 20
TK-02-20-2-500: Complete system with two heavy duty guide carriages type 02, installation size 20 and standard guide rail, 500mm length

Can be combined with:

TS-01-...

Technical data
▶ Page 1059

drylin® T rail guides | Product range

Compact for tough applications

TW-03

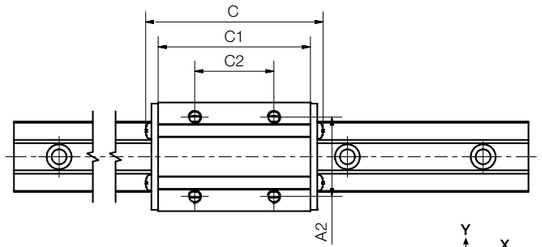
Complete system online

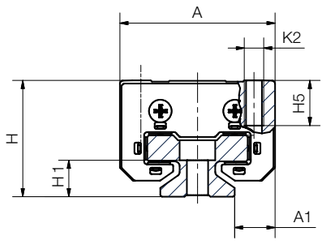
Order key

Type

TW-03-25

Guide carriage | Reduced weight | Installation size





Dimensions [mm]

Part No.	Weight [kg]	H ±0.35	A	C	A1	A2	C1	C2 ±0.35	H1	H5	K2	Tightening torque Max. [Nm]
TW-03-25	0.16	36	48	81	14	35	67.4	35	5	13	M6	6.0

All elements can be ordered individually or as assembled systems

TW-03-25: Compact guide carriage, installation size 25

TK-03-25-2-500: Complete system with two compact guide carriages type 03, installation size 25 and standard guide rail, 500mm length

Can only be combined with:

TS-01-20 TS-11-20

Technical data ▶ Page 1059

drylin® T rail guides

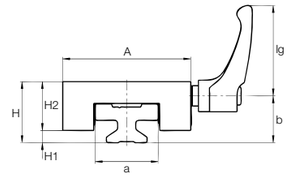
drylin® T rail guides | Product range

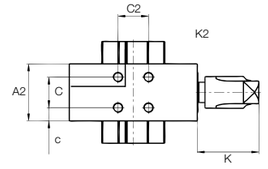
Accessories: Manual clamp

Compact design

Plastic clamping elements

TWBM-11





Order key

Type

TWBM-11-15

Manual clamp | Compact | Installation size

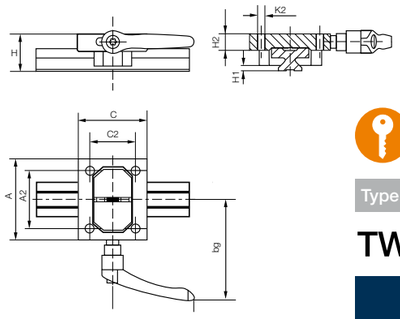
Dimensions [mm]

Part No.	Clamp force [N]	A	a	A2	H	H1	H2	K	K2	C	C2	c	lg	b
TWBM-11-15	180	47	22	23	24	4	20	30	M4	15	15	4	44	18.9
TWBM-11-20	180	63	31	28	30	5	24	30	M5	15	15	6.5	44	23.0
TWBM-11-25	400	70	34	35	36	5	31	39	M6	20	20	7.5	63.63	26.2
TWBM-11-30	500	90	40	38	42	6.5	35.5	47	M6	20	20	9	78	32.4

Standard design

with brass clamp

TWBM-01



Order key

Type

TWBM-01-25

Manual clamp | Standard | Installation size

Dimensions [mm]

Part No.	Clamp force [N]	A	A2	H	H1	H2	K2	C	C2	lg	bg
TWBM-01-25	500	80	57	36	5	16	M8	68	45	80	99

Can only be combined with:

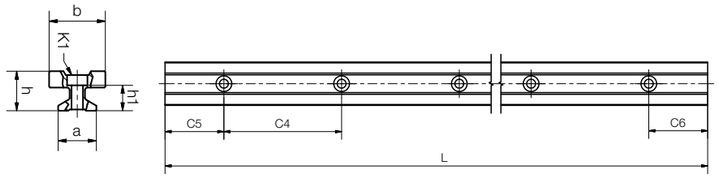
TS-01-...

drylin® T rail guides | Product range

Miniature guide rails

TS-04

Complete system online



Order key

Type

TS-04-07

Guide rail | Miniature | Installation size

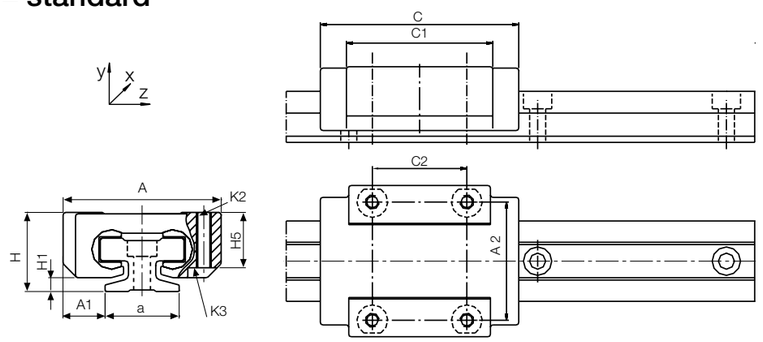
Curved rail profiles
▶ Page 962

Dimensions [mm]

Part No.	Weight	L	a	C4	C5	C5	C6	C6	h	h1	K1 for screw	b	Iy	Iz	Wby	Wbz
		Max.	–0.2		Min.	Max.	Min.	Max.								
	[kg/m]										DIN 912		[mm⁴]	[mm⁴]	[mm³]	[mm³]
TS-04-07	0.08	2,000	7	15	5	12	5	12	5.5	3.7	M2	8	131	90	32	29
TS-04-09	0.11	2,000	9	20	5	14.5	5	14.5	6.3	4.6	M2	9.6	252	169	52	49
TS-04-12	0.20	2,000	12	25	5	17.0	5	17.0	8.6	5.9	M3	13	856	574	132	120
TS-04-15	0.33	3,000	15	40	10	29.5	10	29.5	10.8	7.0	M3	17	2,420	1,410	285	239

Miniature guide carriage – standard

TW-04



Dimensions [mm]

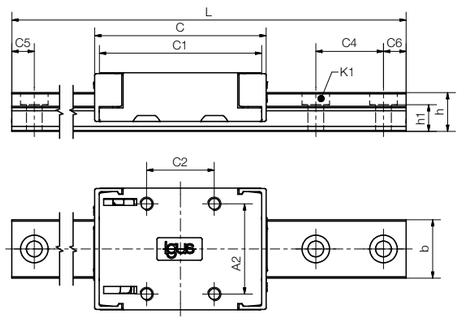
Part No.	Weight	H	A	C	A1	A2	C1	C2	H1	H5	K2 thread	Tightening torque	K3 for screw
		±0.2	–0.2	±0.3	±0.35				±0.35				
	[g]											[Nm]	DIN 912
TW-04-07	8	8	17	23	5	12	21	8	1.5	–	M2	0.25	–
TW-04-09	17	10	20	29	5.5	15	18	13	1.7	7.2	M2	0.25	–
TW-04-12	34	13	27	34	7.5	20	22	15	2.2	9.5	M3	0.50	M2
TW-04-15	61	16	32	42	8.5	25	31	20	2.8	11	M3	0.50	M2

drylin® T rail guides | Product range

Adjustable miniature guide carriage

TWE-04

Complete system online



Order key

Type

TW E -04-12

Guide carriage | Adjustable clearance | Miniature | Installation size

High corrosion resistance by use of re-coating finish

Dimensions [mm]

Part No.	Weight	H	A	C	A1	A2	C1	C2	H1	H5	K2 thread	K3 for screw
		±0.2	–0.2	±0.3	±0.35				±0.35			
	[g]											DIN 912
TWE-04-12	36	13	27	38	7.5	20	36	15	2.2	9.5	M3	M2
TWE-04-15	61	16	32	45	8.5	25	31	20	2.8	11	M3	M2

Press in, turn, snap into place

Tool: screwdriver with 3mm edge wide

Right side: setting the height clearance

Left side: setting the lateral clearance

Can be combined with:

TS-04-...

Technical data
▶ Page 1059

drylin® T rail guides | Ordering options

drylin® T replacement plastic slide elements (set)

Material iglidur® J ▶ Page 159
Material iglidur® J200 ▶ Page 261

Guide carriages	Part No. Sliding part set
TW-12-15	TEK-12-15 (J200)
TW-12-20	TEK-12-20 (J200)
TW-12-25	TEK-12-25 (J200)
TW-12-30	TEK-12-30 (J200)
TW-01-15	TEK-01-15 (J)
TW-01-20	TEK-01-20 (J)
TW-01-25	TEK-01-25 (J)
TW-01-30	TEK-01-30 (J)
TW-02-20	TEK-02-20 (J)
TW-02-25	TEK-02-25 (J)
TW-02-30	TEK-02-30 (J)
TW-04-09	TEK-04-09 (J)
TW-04-12	TEK-04-12 (J)
TWE-04-12	TEK-E-04-12 (J)
TW-04-15	TEK-04-15 (J)
TWE-04-15	TEK-E-04-15 (J)

drylin® T end caps for series 01 guide rail holes:

Rail	Part No. End cap
TS-01-15	TSZ-011501
TS-01-20	TSZ-012001
TS-01-25	TSZ-012501
TS-01-30	TSZ-013001

When using the end caps, screws with a low screw head must be used to attach the rail.

Part No.	$F_{ymax.}$, $F_{zmax.}$ [N]
TW-01/-12-15	2,000
TW-01/-02/-12-20	3,700
TW-01/-02/-03/-12-25	5,000
TW-01/-02/-12-30	7,000

drylin® T – system design

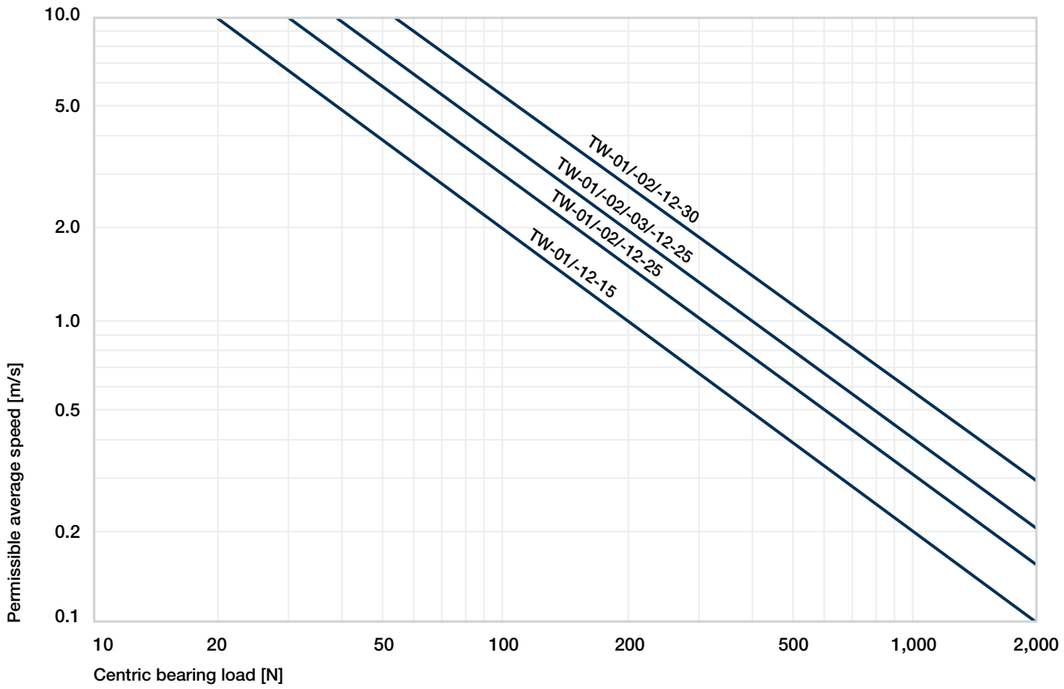
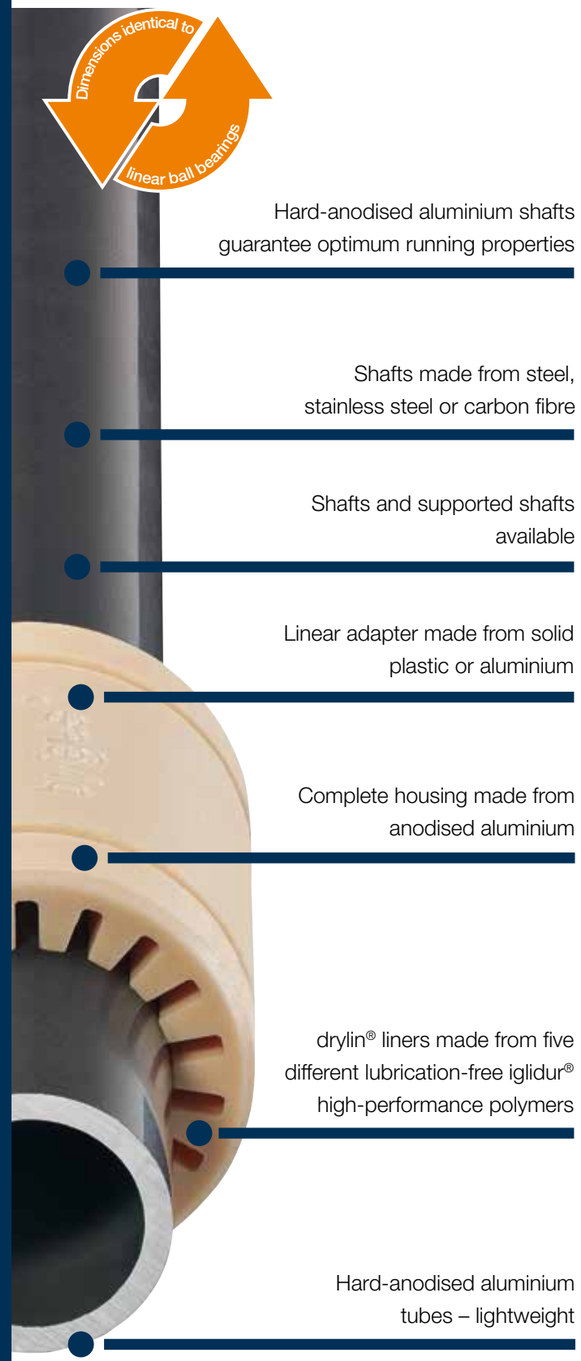


Diagram 04: Determination of the maximum permitted speed for the load

drylin® linear technology – drylin® R shaft guides

- Lubrication-free drylin® liners
- Resistance to dust and dirt
- Low coefficient of friction
- Extremely quiet operation
- Many adapter and housing options

Extremely wear-resistant, robust in challenging environments and lightweight



Lubrication-free shaft guides – drylin® R

drylin® R shaft guides are based on extremely wear-resistant polymers specially developed for the linear technology. The dimensions are compatible with standard ball bearings. The special geometry guarantees reliability even in extreme environments.

- 100% lubrication-free
- Dimensionally interchangeable with standard recirculating ball bearings
- Large variety of choice in housing shapes
- Shafts, shaft end blocks and accessories available from stock
- Replaceable liners
- Stainless steel housings available

Typical application areas

- Agricultural machinery
- Automotive
- Medical technology
- Facade construction
- Packaging industry

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +200°C
Min. –40°C

Up to Ø 60mm
More dimensions upon request.

Imperial dimensions available
▶ From page 1612

Service life calculation
▶ www.igus.eu/drylin-expert

Cleanroom certificated
IPA Fraunhofer

Free from toxins
2011/65/EU (RoHS)

ESD-compatible
(electrostatic discharge)

Dimensions correspond to standard for recirculating ball bearings

Liners and press-fit bearings
- Made from iglidur® high-performance polymers
- Easy to fit
- Unaffected by dirt and dust
- Low coefficient of friction, optimised wear quality

▶ Page 1080

Linear plain bearings
- Dimensionally interchangeable with standard recirculating ball bearings
- Extremely lightweight solid plastic bearing
- Aluminium and stainless steel adapters equipped with iglidur® liners

▶ Page 1102

Closed pillow blocks
- Pre-assembled linear housing with drylin® liners
- Material: Anodised aluminium
- Fixed and floating bearing version available

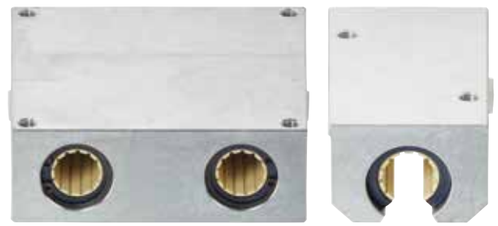
▶ Page 1118

Linear bearings and pillow blocks, open design
- For supported shafts
- Round or with housing
- Clearance adjustment (optional)

▶ Page 1125

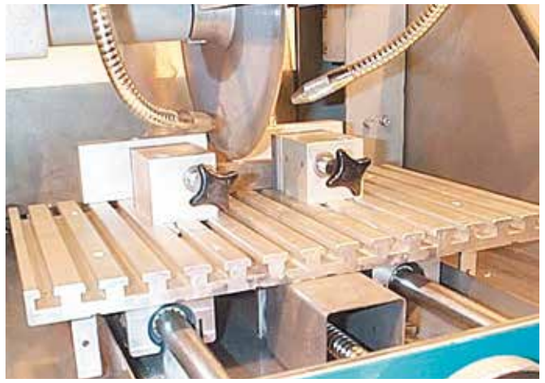
Flanged linear plain bearings
- Pre-assembled housings with drylin® liners
- Round or square flange
- Tandem flange housing for additional stability

▶ Page 1130



Quad block
- Closed and open design
- Torque-resistant quad block housing with four linear adapters
- Also available as tandem housing

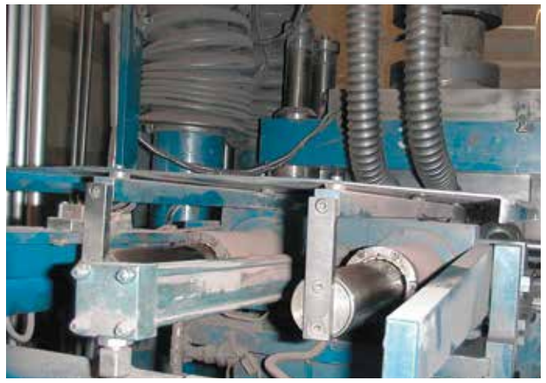
▶ Page 1138



drylin® R linear plain bearings on supported aluminium shafts are used in this grinder to guide the cutting table. The drylin® components stand for extreme dirt resistance, accurate guidance and smooth operation.

Saw mill: linear guide with iglidur® J plastic liner for the angle stops. iglidur® J liners are best suited for most linear applications due to their low wear and low friction properties.

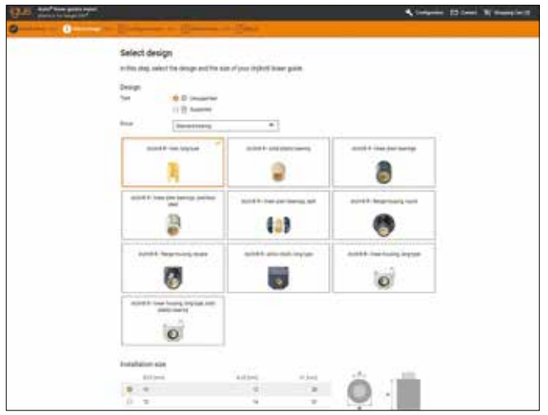
The machine now runs entirely free of troubles for multiple years with drylin® RJUM-01 linear bearings despite the extremely heavy – duty operation.



By changing over to the drylin® R linear plain bearing, the maintenance rate of this compaction unit could be extended by two years, despite high stressing from powder particles and abrasive agents.

Since the sliding bearing should be maintenance-free, precise, compact, durable and very resilient, liners were mounted directly in the passages of the machine frame.

The production line should be adjusted without setup time being required. drylin® linear guides, which enable precise and fast adjustment, were used for this.



Expert for linear guides: System selection & service life calculation with CAD

Configure linear bearings and calculate their service life – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.

▶ **www.igus.eu/drylin-expert**

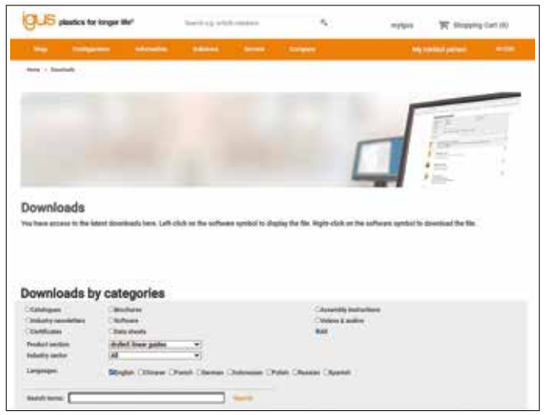
Download the online tool app now

Download on the App Store

drylin® CAD configurator: Generate complete 3D models for drylin® linear technology according to your specifications

The igus® CAD online configurator gives you the ability to design and save your linear guide as a system, individual components directly as a 3D model in all commonly used formats, or to have these sent by e-mail – free of charge and without registration.

▶ **www.igus.eu/drylin-CAD**

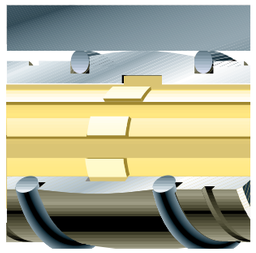


More information about the products can be found in the igus® download area

- Assembly instructions
- Assembly videos
- System design
- Catalogues

▶ **www.igus.eu/downloads**

drylin® R linear plain bearings



The drylin® standard round bearings consist of a interchangeable iglidur® J liner that is manufactured to be a mechanical fit into an anodised aluminium adapter. The locating spigot of the liner is carried out by a snap ring groove. drylin® R linear plain bearings, made from solid plastic, are dimensionally equivalent to standard ball bearings. They are made entirely out of wear-resistant iglidur® J material and can offer technical advantages in addition to the clear price advantage. Thus, applications in which machine parts are primarily stainless steel, e.g. food and filling equipment, are well suited for the use of solid plastic bearings. An additional weight-saving is also easily obtained.

Both versions are designed for the installation in housing holes with the tolerance H7. The mounting is done like in ball bearings with circlips according to DIN 471/472.

The narrow design of the 02 series linear plain bearings, is clipped into the H7 housing hole. Standard commercial 2-component adhesives can be used for this purpose.

Dirt, dust, fibres

An important feature of all the available linear bearings is their tolerance of dirt. For most systems the application of wipers or seals is recommended for even low dirt accumulation. No other system features such a high safety with dust, lint and coarse dirt as drylin®. The patented design of the bearing surface using individual slide pads connected by thin film sections, provides performance benefits for dirty environments. Dirt, even when it becomes wet on the shaft, is wiped away by the individual glide pads and is moved into the open areas. The running sections of the drylin® bearing then slide on the shaft that has been cleared of all contaminants.

Split linear bearings

Applications that are on the edge of technical feasibility or in extremely harsh environments often require frequent replacement of the bearings. In many cases, drylin® can give a multiple increase in the service life. However, in extreme applications, replacement of the bearings is necessary, even with drylin®. drylin® linear plain bearings can provide considerable cost reductions in such cases as only the polymer bearing liner has to be replaced. This often means a reduction of more than 90% in replacement part costs. In addition the dismantling of the shafts is avoided.

	 The all-rounder – iglidur® J	 The specialist – iglidur® J200	 The extreme – iglidur® X	 The endurance runner – iglidur® E7	 The FDA-compliant – iglidur® A180	 Blue Sky Thinking FDA/EU-compliant iglidur® A160
Application temperature	from –50°C to +90°C	from –50°C to +90°C	from –100°C to +250°C	from –50°C to +70°C	from –50°C to +90°C	from –50°C to +90°C
Best coefficient of friction with	Steel shaft	Hard-anodised aluminium	Hard-chromed steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Volume resistance	> 10^{13}Ωcm	> 10^{8}Ωcm	< 10^{5}Ωcm	> 10^{9}Ωcm	> 10^{12}Ωcm	> 10^{12}Ωcm
Moisture absorption	1.3% weight	0.7% weight	0.5% weight	< 0.1% weight	0.2% weight	< 0.1% weight
Maximum service life with	Hard-anodised aluminium	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Potential counter partner	All shaft materials	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	All shaft materials	Stainless steel
Permissible stat. surface pressure	35MPa	23MPa	150MPa	18MPa	28MPa	15MPa
Part No.	JUM-...	J200UM-...	XUM-...	E7UM-...	A180UM-...	A160UM-...

The split bearings are easily pulled off the housing and opened. The slotted liner can be simply mounted on the shaft. Clip a new bearing liner over the shaft, put the two housing halves together, install – done! With this product range of split drylin® bearings, installation times can be reduced to a minimum.

Material properties:
iglidur® J ▶ Page 159
iglidur® J200 ▶ Page 261
iglidur® X ▶ Page 279
iglidur® E7 ▶ Page 267
iglidur® A160 ▶ Page 419
iglidur® A180 ▶ Page 401
iglidur® L100 ▶ Page 1654

Series L1 – low-clearance press-fit bearings

The series L1 plain bearings are composed of the iglidur® L100 bearing material, an extremely wear-resistant plastic compound. They are sub-divided into a press-fit area and a gliding range. The gliding range is composed of individual crossbars which are linked to each other by thin film bridges. These film bridges compensate the elongation of the bearing through heating or moisture. This separation enables the almost clearance-free design of the bearings, as there is no clamping of the shaft. The cylinder-shaped press-fit area is also visually very distinct from the gliding range. The function of this area, which shows a distinct clearance compared to the shaft, is to fix the bushing firmly in the housing by means of a press fit.

Compressive strength

iglidur® plain bearings are homogeneously filled with solid lubricants. In this way, lubricants cannot be removed, even at high loads. The iglidur® L100 material allows an average static surface pressure of 70MPa. However, only half of the load-bearing surface can carry loads and this is taken into account in the calculation.

Surface speeds

The following table shows possible surface speeds of L1 bearings.

- Extremely high wear resistance
- Low coefficient of friction
- Vibration-dampening
- High static compressive strength
- Good chemical resistance
- Resistant to dirt
- Also suitable for soft and rough shafts

iglidur® L100	Rotating	Oscillating	Linear
Continuous [m/s]	1.5	1.5	3
Short-term [m/s]	3	3	10

Table 02: Maximum surface speed for iglidur® L100

Coefficient of friction

Plain bearings of the L1 series are designed for dry operation against steel. The best results are attained with surface finishes from 0.3 to 0.8 Ra. The coefficient of sliding friction reduces with increasing load. Typical coefficient of friction in dry operation are 0.2 to 0.3. But the value can be higher with less suitable shafts.

Operating temperatures

Temperatures affect the compressive strength, the wear and the securing of the bearing in the housing. A firm fit could be determined in all the tests up to a temperature of +70°C. At higher temperatures, an additional securing of the bearing is recommended. With effective securing, L1 plain bearings could also be used at temperatures over +130°C.

iglidur® L100	Application temperatures
Minimum	–30°C
Max. long-term	+100°C
Maximum, short-term	+190°C

Table 03: Temperature limits for iglidur® L100

Floating bearings for linear plain bearings

drylin® 03 series linear plain bearings offer great advantages in applications with parallel shafts. With their geometry, they are able to compensate for alignment and parallelism errors and should be used on the shaft located furthest from the drive mechanism. The design provides a spherical area on the outside diameter of the aluminium adapter for self-alignment. Reductions in load capacity are prevented, since the shaft always lies on the total projected surface. Due to the even load distribution over the entire bearing, edge pressure is not possible with the self-aligning drylin® linear bearings. In order to compensate parallelism errors between two shafts, the outer diameter is designed to be smaller than the housing hole diameter by 0.2 to 0.3mm (depending on the size). With the use of mounted O-rings, these bearings have an elastic bearing seat. The clearance between the bearing and housing allows for the maximum compensation of possible shaft miss-alignment.

The drylin® R self-aligning bearings are supplied hard-anodised. These surfaces guarantee the highest wear resistance if the aluminium bearing moves in the housing during compensation adjustments. Another option are the pillow blocks in the OJUM-06 LL and RJUM-06 LL design series. The mounting of the bearing allows a parallelism adjustment between the shafts by ±3mm. The particular suspension of the supporting housing on an axis running in the z-direction enables an angular error compensation of up to 3.5°.

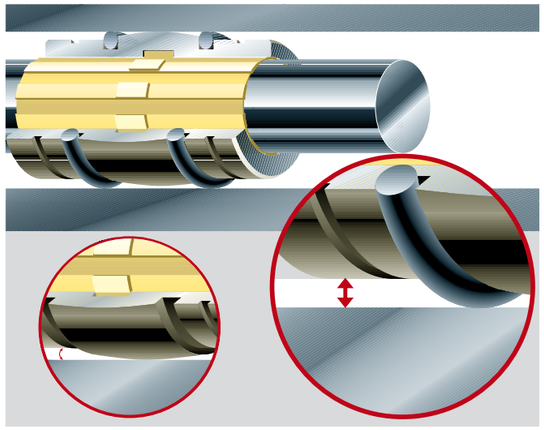


Diagram 02: By defined installation clearance and externally mounted O-rings, the self-aligning drylin® R bearings of the type series 03 can compensate parallelism errors. The spherical drylin® adapter can compensate for parallelism errors. A hard-anodisation protects the aluminium adapter from wear.

Eccentric forces

To ensure successful use of maintenance-free drylin® linear bearings, it is necessary to follow certain recommendations: if the distance between the driving force point and the fixed bearings is more than twice the bearing spacing (2:1 rule), a static friction value of 0.25 can theoretically result in jamming on the guides.

This principle applies regardless of the value of the load or drive force. The friction product is always related to the fixed bearings. The greater the distance between the drive and guide bearings, the higher the degree of wear and required drive force.

Failure to observe the 2:1 rule during a use of linear plain bearings can result in uneven motion or even system blockage. Such situations can often be remedied with relatively simple modifications. If you have any questions on design and/or assembly, please make use of our technical support.

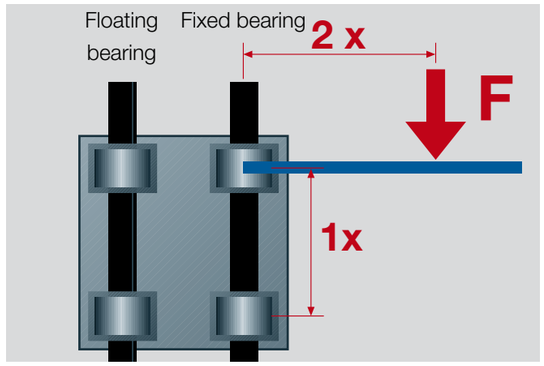


Figure 03: The 2:1 rule

RJUM-06-LL
▶ Page 1124

OJUM-06-LL
▶ Page 1125

RJUM-03/OJUM-03 series	±0.5°
RJUM-06-LL/OJUM-06-LL series	±3.5°

Table 04: Compensation of misalignment errors

RJUM-03/OJUM-03 series	±0.1mm
RJUM-06-LL/OJUM-06-LL series	±3.0mm

Table 05: Compensation of parallelism errors

drylin® R shaft guides are designed for completely lubrication-free operation. The dimensions of the respective linear adapter and housing meet the standard for recirculating ball bearings. During assembly, please note the following installation instructions:

Design tips for drylin® linear plain bearings:
The mentioned values for "$F_{max.}$" relate to the performance of the iglidur® liners made from high-performance plastics and cannot be used as the only selection tool for the calculation of an application. The maximum carrying capacity of the entire bearing system depends on the geometry, housing shape, the housing material, the connection including the screws used and requires a separate inspection. For a detailed analysis, please use our online configurator at
▶ **www.igus.eu/drylin-expert**

Recommended tolerance for the shaft: h6–h10
Surface roughness [Ra]: 0.15–0.6
Guide shafts round/supported ▶ **Shafts page 1149**

Recommended housing hole H7
Linear plain bearings RJUM-01/03, TJUM-01/03, RJM, RJMP, RJ260(U)M02, press-fit bearings WLM, WLFM

Liners:
_UM-01, _UMO-01, _UM-11, _UMO-11, _UM-02
● Interlocking with the housing bore ● Locating spigot is supported by a snap ring groove ● Anti-rotation feature through engagement of the pin in hole Ø z

Press-fit bearings:
WLM, WLFM
● Press-fit installation into the H7 housing hole
▶ Assembly instructions, **page 57**

Linear plain bearings:
RJUM-01, RJUM-11, RJUM-ES, TJUM-01, RJUM-03, TJUM-03, RJUI-01, RJUI-03, TJUI-01, TJUI-03
● Secured by DIN 471 or 472 circlips, metric types (not included)

Solid plastic bearings:
RJM, RJI-01
● Fastening with circlips according to DIN 471 or 472 (not included) ● The E9 inner tolerance applies only after the press-fit

Solid plastic bearings:
RJMP
● Easy assembly by soft press-fit
● Secured by DIN 471 or 472 circlips (not included)

Linear plain bearings:
RJUM-02
● Secured by press-fit in steel housing hole H7 or aluminium housing hole K7
● Alternatively, the adapter can be glued with commercially available 2-component adhesive into a housing

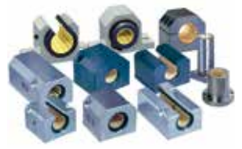
Compact bearings:
RJ260 (UM-02)
● Locating spigot and press-fit into housing hole H7 ● Alternatively, the adapter can be glued with commercially available 2-component adhesive into a housing

Linear plain bearings:
OJUM-01, OJUM-03, OJUI-01, OJUI-03
● Adapter secured with setscrews (not included)

Quad blocks: RQA, RGA
Tandem design: RTA
● The bearing in the housing is secured by DIN 472 circlips

Linear housings:
RGAS
● The bearing in the housing is secured by DIN 471 circlips

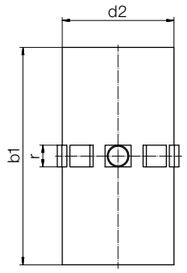
Quad blocks: OQA, OGA,
Linear housings: OGAS,
Tandem design: OTA
● The bearings is secured by screws

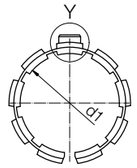


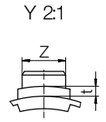
Pillow blocks: RJUM/E/T-05, RJUM-06/-LL, OJUM/E-06/-LL, Flange housings: FJUM/T-01/02
quad blocks: RGA, OGA
Tandem designs: RTA, OTA
Linear bearings: RGAS, OGAS
● Mounting screws of the housing DIN 912-8.8 ● Circlips according to DIN 7980

drylin® R liners | Product range

Long, closed design for shafts – made from iglidur® J (the all-rounder)







Order key

Type	Size
J U M-01-10	

iglidur® J	Liner	Metric	Standard	Inner Ø d1

The all-rounder for all shaft surfaces in indoor and outdoor applications

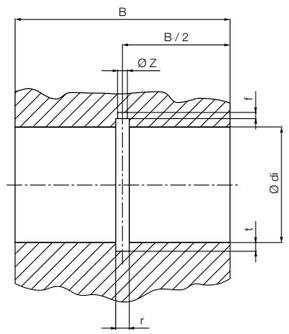
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78)]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	1.10	**JUM-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.50	**JUM-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	2.20	**JUM-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.90	**JUM-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	8.23	**JUM-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	14.95	**JUM-01-30**
35	+0.040 +0.085	39	69	5.0	0.8	4.0	18.20	**JUM-01-35**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	23.16	**JUM-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	45.35	**JUM-01-50**
60	+0.050 +0.150	65	124	8.0	2.0	6.5	70.00	**JUM-01-60[79)]**

Housing hole for JUM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**JUM-01-10**
12	14	32	3.0	1.0	1.5	3.1	**JUM-01-12**
16	18	36	3.5	1.0	1.7	3.6	**JUM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**JUM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**JUM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**JUM-01-30**
35	39	70	5.0	1.0	2.0	4.1	**JUM-01-35**
40	44	80	6.0	1.5	2.5	5.1	**JUM-01-40**
50	55	100	7.0	1.5	2.5	6.1	**JUM-01-50**
60	65	125	8.0	2.5	3.0	6.5	**JUM-01-60[79)]**



79) in two parts

Can be combined with:

RJUM-01/-03
TJUM-01/-03

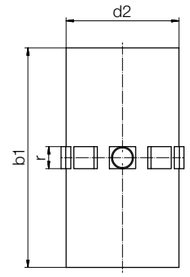
RJUM-06/-06-LL

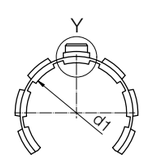
FJUM-01/-02

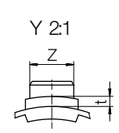
Imperial dimensions ▶ Page 1612

drylin® R liners | Product range

Long, open design for supported shafts – made from iglidur® J (the all-rounder)







Order key

Type	Size
J U M O-01-10	

iglidur® J	Liner	Metric	Open	Standard	Inner Ø d1

The all-rounder for all shaft surfaces in indoor and outdoor applications

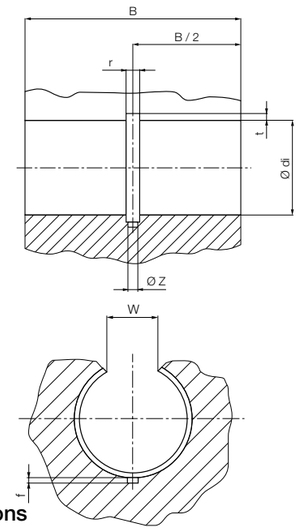
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78)]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	0.90	**JUMO-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.16	**JUMO-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	1.71	**JUMO-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.16	**JUMO-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	6.97	**JUMO-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	12.38	**JUMO-01-30**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	20.18	**JUMO-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	38.60	**JUMO-01-50**
60	+0.050 +0.150	65	124	8.0	2.0	6.5	60.10	**JUMO-01-60[79)]**

Housing hole for JUMO-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	W	r +0.5	t +0.05	f +0.1	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**JUMO-01-10**
12	14	32	9.0	3.0	1.0	1.5	3.1	**JUMO-01-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**JUMO-01-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**JUMO-01-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**JUMO-01-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**JUMO-01-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**JUMO-01-40**
50	55	100	25.5	7.0	1.5	2.5	6.1	**JUMO-01-50**
60	65	125	27.2	8.0	2.5	3.0	6.5	**JUMO-01-60[79)]**



79) in two parts

Can be combined with:

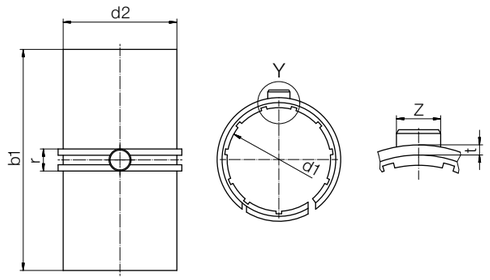
OJUM-01/-03

OJUM-06/-06-LL

Imperial dimensions ▶ Page 1612

drylin® R liners | Product range

Long, closed design, precise for shafts – made from iglidur® J (the all-rounder)



Order key

Type	Size
J U M-11-10	

iglidur® J	Liner	Metric	Precise	Inner Ø d1

- Max. bearing clearance reduced by 50%
- Increased contact surface: longer service life

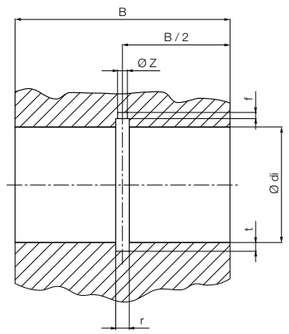
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance78)	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.000 +0.040	12	28	3.0	0.8	2.5	1.23	**JUM-11-10**
12	+0.000 +0.040	14	31	3.0	0.8	3.0	1.65	**JUM-11-12**
16	+0.000 +0.040	18	35	3.5	0.8	3.5	2.42	**JUM-11-16**
20	+0.000 +0.040	23	44	5.0	0.8	3.5	5.49	**JUM-11-20**
25	+0.000 +0.040	28	57	5.0	0.8	4.0	8.86	**JUM-11-25**
30	+0.000 +0.050	34	67	5.0	0.8	4.0	16.63	**JUM-11-30**
40	+0.000 +0.050	44	79	6.0	1.3	5.0	26.06	**JUM-11-40**
50	+0.000 +0.060	55	99	7.0	1.3	6.0	48.82	**JUM-11-50**

Housing hole for JUM-11 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**JUM-11-10**
12	14	32	3.0	1.0	1.5	3.1	**JUM-11-12**
16	18	36	3.5	1.0	1.7	3.6	**JUM-11-16**
20	23	45	5.0	1.0	2.0	3.6	**JUM-11-20**
25	28	58	5.0	1.0	2.0	4.1	**JUM-11-25**
30	34	68	5.0	1.0	2.0	4.1	**JUM-11-30**
40	44	80	6.0	1.5	2.5	5.1	**JUM-11-40**
50	55	100	7.0	1.5	2.5	6.1	**JUM-11-50**



Can be combined with:

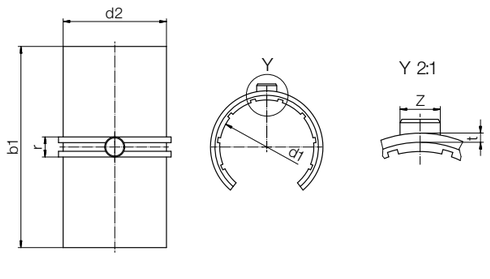

RJUM-01/-03
TJUM-01/-03


RJUM-06/-06-LL


FJUM-01/-02

drylin® R liners | Product range

Long, open design, precise for supported shafts – made from iglidur® J (the all-rounder)



Order key

Type	Size
J U M O-11-10	

iglidur® J	Liner	Metric	Open	Precise	Inner Ø d1

- Max. bearing clearance reduced by 50%
- Increased contact surface: longer service life

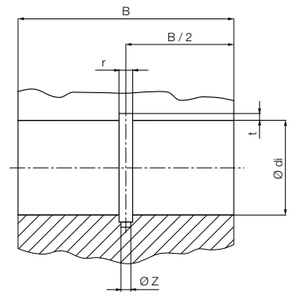
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

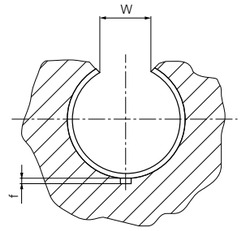
Dimensions [mm]

d1	d1 tolerance78)	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.000 +0.040	12	28	3.0	0.8	2.5	1.10	**JUMO-11-10**
12	+0.000 +0.040	14	31	3.0	0.8	3.0	1.50	**JUMO-11-12**
16	+0.000 +0.040	18	35	3.5	0.8	3.5	2.20	**JUMO-11-16**
20	+0.000 +0.040	23	44	5.0	0.8	3.5	4.90	**JUMO-11-20**
25	+0.000 +0.040	28	57	5.0	0.8	4.0	8.23	**JUMO-11-25**
30	+0.000 +0.050	34	67	5.0	0.8	4.0	14.95	**JUMO-11-30**
40	+0.000 +0.050	44	79	6.0	1.3	5.0	23.16	**JUMO-11-40**
50	+0.000 +0.060	55	99	7.0	1.3	6.0	45.35	**JUMO-11-50**

Housing hole for JUMO-11 | Dimensions [mm]

Shaft Ø	di H7	B h10	W +0.2	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**JUMO-11-10**
12	14	32	9.0	3.0	1.0	1.5	3.1	**JUMO-11-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**JUMO-11-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**JUMO-11-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**JUMO-11-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**JUMO-11-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**JUMO-11-40**
50	55	100	25.5	7.0	1.5	2.5	6.1	**JUMO-11-50**





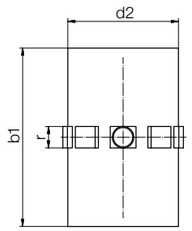
Can be combined with:

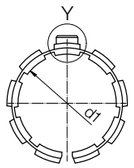

OJUM-01/-03

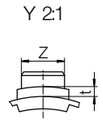

OJUM-06/-06-LL

drylin® R liners | Product range

Short, closed design for shafts – made from iglidur® J (the all-rounder)







Order key

Type	Size
J U M	-02-10

iglidur® J	Liner	Metric	Compact	Inner Ø d1

The all-rounder for all shaft surfaces in indoor and outdoor applications

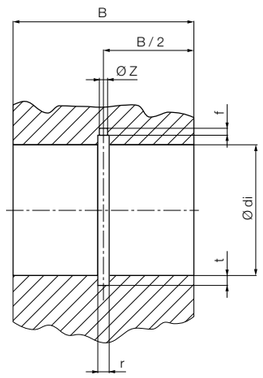
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	25	3.0	0.8	2.5	1.02	**JUM-02-10**
12	+0.030 +0.070	14	27	3.0	0.8	3.0	1.27	**JUM-02-12**
16	+0.030 +0.070	18	29	3.5	0.8	3.5	1.82	**JUM-02-16**
20	+0.030 +0.070	23	29	5.0	0.8	3.5	3.27	**JUM-02-20**
25	+0.030 +0.070	28	39	5.0	0.8	4.0	5.75	**JUM-02-25**
30	+0.040 +0.085	34	49	5.0	0.8	4.0	11.28	**JUM-02-30**
40	+0.040 +0.085	44	59	6.0	1.3	5.0	17.94	**JUM-02-40**
45	+0.040 +0.085	50	59	7.0	1.3	6.0	27.00	**JUM-02-45**
50	+0.050 +0.150	55	69	7.0	1.3	6.0	32.56	**JUM-02-50**

Housing hole for JUM-02 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	26	3.0	1.0	1.0	2.6	**JUM-02-10**
12	14	28	3.0	1.0	1.5	3.1	**JUM-02-12**
16	18	30	3.5	1.0	1.7	3.6	**JUM-02-16**
20	23	30	5.0	1.0	2.0	3.6	**JUM-02-20**
25	28	40	5.0	1.0	2.0	4.1	**JUM-02-25**
30	34	50	5.0	1.0	2.0	4.1	**JUM-02-30**
40	44	60	6.0	1.5	2.5	5.1	**JUM-02-40**
45	50	60	7.0	1.5	2.5	6.1	**JUM-02-45**
50	55	70	7.0	1.5	2.5	6.1	**JUM-02-50**



Can be combined with:

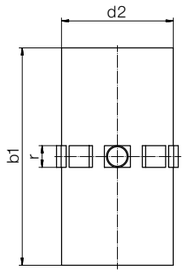

RJUM-02

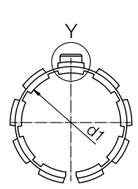

RJUM-05/RJUME-05
TJUM-05/RJUMT-05

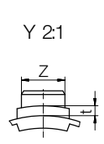

FJUMT-01/-02

drylin® R liners | Product range

Long, closed design for shafts – made from iglidur® J200 (the specialist)







Order key

Type	Size
J200 U M	-01-10

iglidur® J200	Liner	Metric	Standard	Inner Ø d1

The "specialist" with the best running performance on aluminium

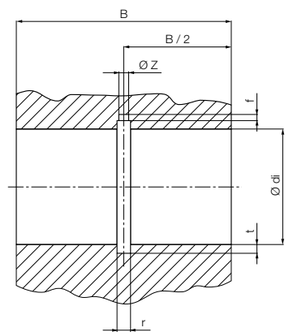
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	1.10	**J200UM-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.50	**J200UM-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	2.54	**J200UM-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	5.66	**J200UM-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	9.51	**J200UM-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	17.27	**J200UM-01-30**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	26.75	**J200UM-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	52.38	**J200UM-01-50**

Housing hole for J200UM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**J200UM-01-10**
12	14	32	3.0	1.0	1.5	3.1	**J200UM-01-12**
16	18	36	3.5	1.0	1.7	3.6	**J200UM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**J200UM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**J200UM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**J200UM-01-30**
40	44	80	6.0	1.5	2.5	5.1	**J200UM-01-40**
50	55	100	7.0	1.5	2.5	6.1	**J200UM-01-50**



Can be combined with:

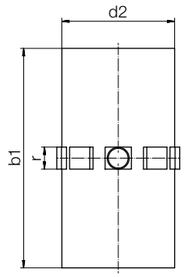

RJUM-01/-03
TJUM-01/-03

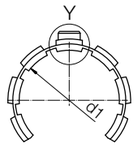

RJUM-06/-06-LL

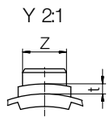

FJUM-01/-02

drylin® R liners | Product range

Long, open design for supported shafts – made from iglidur® J200 (the specialist)







Order key

Type					Size
J200	U	M	O	-01	-10
iglidur® J200	Liner	Metric	Open	Standard	Inner Ø d1

The "specialist" with the best running performance on aluminium

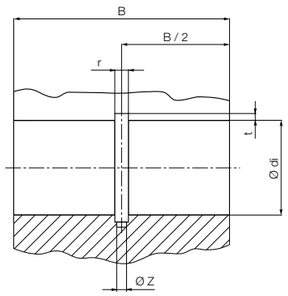
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

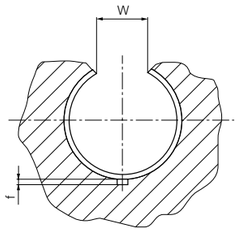
Dimensions [mm]

d1	d1 tolerance[78)]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	1.04	**J200UMO-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.34	**J200UMO-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	1.98	**J200UMO-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.80	**J200UMO-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	8.05	**J200UMO-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	14.30	**J200UMO-01-30**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	23.31	**J200UMO-01-40**

Housing hole for J200UMO-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	W	r +0.5	t +0.05	f +0.1	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**J200UMO-01-10**
12	14	32	9.0	3.0	1.0	1.5	3.1	**J200UMO-01-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**J200UMO-01-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**J200UMO-01-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**J200UMO-01-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**J200UMO-01-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**J200UMO-01-40**





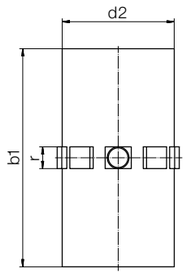
Can be combined with:

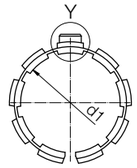

OJUM-01/-03

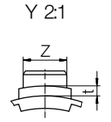

OJUM-06/-06-LL

drylin® R liners | Product range

Long, closed design for shafts – made from iglidur® E7 (the endurance runner)







Order key

Type					Size
E7	U	M		-01	-10
iglidur® E7	Liner	Metric		Standard	Inner Ø d1

The "endurance runner" up to 8 times longer service life on steel shafts

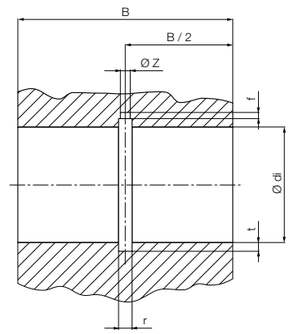
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +70°C

Dimensions [mm]

d1	d1 tolerance[78)]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	0.73	**E7UM-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.01	**E7UM-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	1.45	**E7UM-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	3.25	**E7UM-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	5.44	**E7UM-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	9.88	**E7UM-01-30**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	17.30	**E7UM-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	36.30	**E7UM-01-50[79)]**
60	+0.050 +0.150	65	124	8.0	2.5	6.5	54.80	**E7UM-01-60[79)]**

Housing hole for E7UM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.5	t +0.05	f +0.1	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**E7UM-01-10**
12	14	32	3.0	1.0	1.5	3.1	**E7UM-01-12**
16	18	36	3.5	1.0	1.7	3.6	**E7UM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**E7UM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**E7UM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**E7UM-01-30**
40	44	80	6.0	1.5	2.5	5.1	**E7UM-01-40**
50	55	100	7.0	1.5	2.5	6.1	**E7UM-01-50[79)]**
60	65	125	8.0	2.5	3.0	6.5	**E7UM-01-60[79)]**



79) in two parts

Can be combined with:


RJUM-01/-03
TJUM-01/-03


RJUM-01-ES

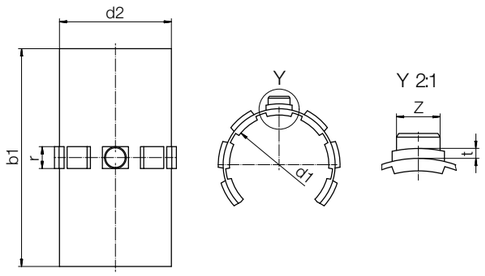

RJUM-06/-06-LL


FJUM-01/-02

inch Imperial dimensions ▶ Page 1612

drylin® R liners | Product range

Long, open design for supported shafts – made from iglidur® E7 (the endurance runner)



Order key

Type						Size
E7	U	M	O	-01	-10	
iglidur® E7	Liner	Metric	Open	Standard		Inner Ø d1

The "endurance runner" up to 8 times longer service life on steel shafts

[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +70°C

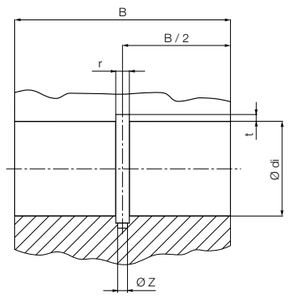
Dimensions [mm]

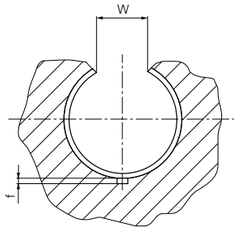
d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	28	3.0	0.8	2.5	0.73	**E7UMO-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.01	**E7UMO-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	1.45	**E7UMO-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	3.25	**E7UMO-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	5.44	**E7UMO-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	9.88	**E7UMO-01-30**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	17.30	**E7UMO-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	36.40	**E7UMO-01-50[79]**
60	+0.050 +0.150	65	124	8.0	2.5	6.5	54.80	**E7UMO-01-60[79]**

Housing hole for E7UMO-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	W	r +0.5	t +0.05	f +0.1	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**E7UMO-01-10**
12	14	32	9.0	3.0	1.0	1.5	3.1	**E7UMO-01-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**E7UMO-01-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**E7UMO-01-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**E7UMO-01-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**E7UMO-01-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**E7UMO-01-40**
50	55	100	25.5	7.0	1.5	2.5	6.1	**E7UMO-01-50[79]**
60	65	125	27.2	8.0	2.5	3.0	6.5	**E7UMO-01-60[79]**

[79] in two parts





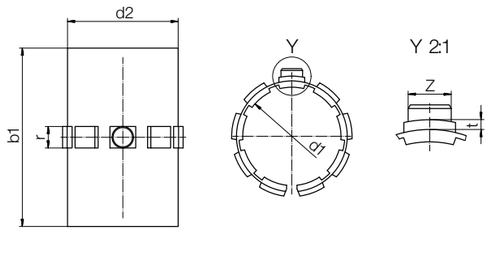
Can be combined with:

OJUM-01/-03

OJUM-06/-06-LL

drylin® R liners | Product range

Short, closed design for shafts – made from iglidur® E7 (the endurance runner)



Order key

Type						Size
E7	U	M	-02	-10		
iglidur® E7	Liner	Metric	Compact			Inner Ø d1

The "endurance runner" up to 8 times longer service life on steel shafts

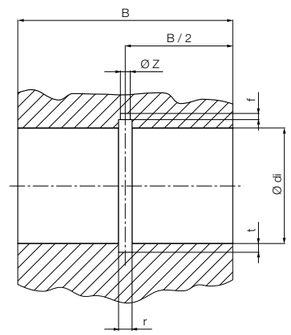
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +70°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.030 +0.070	12	25	3.0	0.8	2.5	0.73	**E7UM-02-10**
12	+0.030 +0.070	14	27	3.0	0.8	3.0	1.01	**E7UM-02-12**
16	+0.030 +0.070	18	29	3.5	0.8	3.5	1.45	**E7UM-02-16**
20	+0.030 +0.070	23	29	5.0	0.8	3.5	3.25	**E7UM-02-20**
25	+0.030 +0.070	28	39	5.0	0.8	4.0	5.44	**E7UM-02-25**
30	+0.040 +0.085	34	49	5.0	0.8	4.0	9.88	**E7UM-02-30**
40	+0.040 +0.085	44	59	6.0	1.3	5.0	17.30	**E7UM-02-40**

Housing hole for E7UM-02 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	26	3.0	1.0	1.0	2.6	**E7UM-02-10**
12	14	28	3.0	1.0	1.5	3.1	**E7UM-02-12**
16	18	30	3.5	1.0	1.7	3.6	**E7UM-02-16**
20	23	30	5.0	1.0	2.0	3.6	**E7UM-02-20**
25	28	40	5.0	1.0	2.0	4.1	**E7UM-02-25**
30	34	50	5.0	1.0	2.0	4.1	**E7UM-02-30**
40	44	60	6.0	1.5	2.5	5.1	**E7UM-02-40**



Can be combined with:

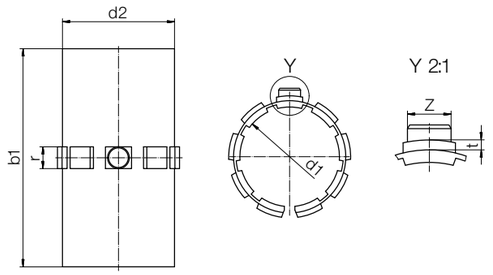
RJUM-02

RJUM-05/RJUME-05
TJUM-05/RJUMT-05

FJUMT-01/-02

drylin® R liners | Product range

Long, closed design for shafts, two-piece – made from iglidur® X (the extreme)



Order key

Type	Size
X U M-01-12	

iglidur® X	Liner	Metric	Standard	Inner Ø d1

The "extreme", resistant to temperature and chemicals on stainless steel and chromed shafts

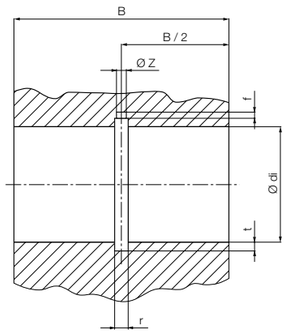
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –100°C
Max. +250°C

Dimensions [mm]

d1	d1 tolerance78)	d2	b1	r	t	Z	Weight [g]	Part No.
12	+0.020 +0.060	14	31	3.0	0.8	3.0	1.50	**XUM-01-12**
14	+0.020 +0.060	18	35	3.5	0.8	3.5	2.13	**XUM-01-14**
16	+0.020 +0.060	18	35	3.5	0.8	3.5	2.20	**XUM-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.90	**XUM-01-20**
25	–0.030 +0.010	28	57	5.0	0.8	4.0	8.23	**XUM-01-25**
30	–0.040 +0.010	34	67	5.0	0.8	4.0	14.95	**XUM-01-30**
40	±0.000 +0.050	44	79	6.0	1.3	5.0	23.16	**XUM-01-40**

Housing hole for XUM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
12	14	32	3.0	1.0	1.5	3.1	**XUM-01-12**
14	16	30	3.5	1.0	1.7	3.6	**XUM-01-14**
16	18	36	3.5	1.0	1.7	3.6	**XUM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**XUM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**XUM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**XUM-01-30**
40	44	80	6.0	1.5	2.5	5.1	**XUM-01-40**



Can be combined with:

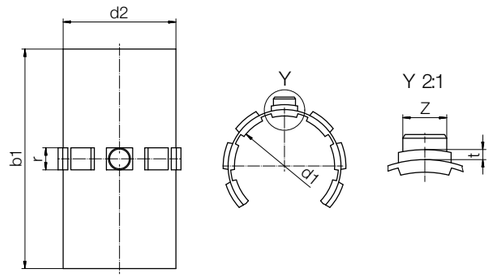

RJUM-01/-03
TJUM-01/-03


RJUM-06/-06-LL


FJUM-01/-02

drylin® R liners | Product range

Long, open design for supported shafts, two-piece – made from iglidur® X (the extreme)



Order key

Type	Size
X U M O-01-10	

iglidur® X	Liner	Metric	Open	Standard	Inner Ø d1

The "extreme", resistant to temperature and chemicals on stainless steel and chromed shafts

78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –100°C
Max. +250°C

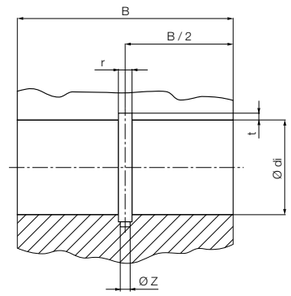
Dimensions [mm]

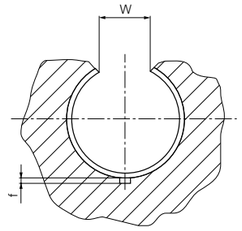
d1	d1 tolerance78)	d2	b1	r	t	Z	Weight [g]	Part No.
10	–0.020 +0.020	12	28	3.0	0.8	2.5	1.00	**XUMO-01-10**110)
12	+0.020 +0.060	14	31	3.0	0.8	3.0	1.20	**XUMO-01-12**
16	+0.020 +0.060	18	35	3.5	0.8	3.5	2.30	**XUMO-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.30	**XUMO-01-20**
25	–0.030 +0.010	28	57	5.0	0.8	4.0	6.80	**XUMO-01-25**
30	–0.040 +0.010	34	67	5.0	0.8	4.0	13.30	**XUMO-01-30**
40	±0.000 +0.050	44	79	6.0	1.3	5.0	22.60	**XUMO-01-40**

Housing hole for XUMO-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	W +0.2	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**XUMO-01-10**110)
12	14	32	9.0	3.0	1.0	1.5	3.1	**XUMO-01-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**XUMO-01-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**XUMO-01-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**XUMO-01-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**XUMO-01-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**XUMO-01-40**

110) One-piece





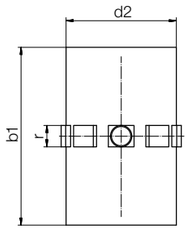
Can be combined with:

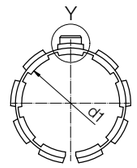

OJUM-01/-03
TJUM-01/-03

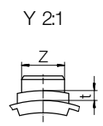

OJUM-06/-06-LL

drylin® R liners | Product range

Short, closed design for shafts, two-pieces – made from iglidur® X (the extreme)







Order key

Type	Size
X U	M-02-12

iglidur® X	Liner	Metric	Compact	Inner Ø d1

The "extreme", resistant to temperature and chemicals on stainless steel and chromed shafts

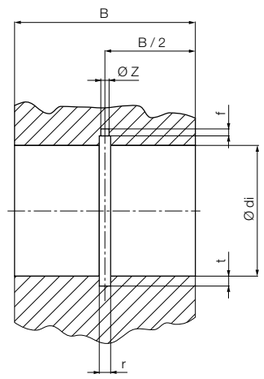
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –100°C
Max. +250°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
12	+0.020 +0.060	14	27	3.0	0.8	3.0	1.3	**XUM-02-12**
16	+0.020 +0.060	18	29	3.5	0.8	3.5	2.5	**XUM-02-16**
20	+0.030 +0.070	23	29	5.0	0.8	3.5	3.4	**XUM-02-20**
25	–0.030 +0.010	28	39	5.0	0.8	4.0	5.6	**XUM-02-25**
30	–0.040 +0.010	34	49	5.0	0.8	4.0	12.0	**XUM-02-30**
40	±0.000 +0.050	44	59	6.0	1.3	5.0	20.0	**XUM-02-40**

Housing hole for XUM-02 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
12	14	28	3.0	1.0	1.5	3.1	**XUM-02-12**
16	18	30	3.5	1.0	1.7	3.6	**XUM-02-16**
20	23	30	5.0	1.0	2.0	3.6	**XUM-02-20**
25	28	40	5.0	1.0	2.0	4.1	**XUM-02-25**
30	34	50	5.0	1.0	2.0	4.1	**XUM-02-30**
40	44	60	6.0	1.5	2.5	5.1	**XUM-02-40**



Can be combined with:


RJUM-02


RJUM-01-ES

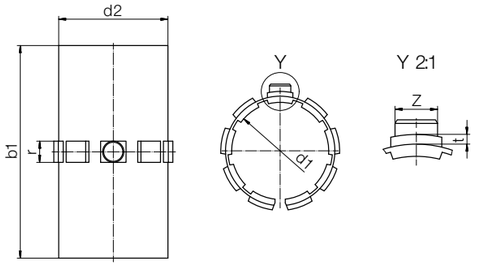

RJUM-05/RJUME-05
TJUM-05/RJUMT-05


FJUMT-01/-02

My sketches

drylin® R liners | Product range

Long, closed design for round shafts – made from iglidur® A180 (FDA-compliant)



Order key

Type	Size
A180 U M-01-10	

iglidur® A180	Liner	Metric	Standard	Inner Ø d1

The FDA-compliant for the food and pharmaceutical industry

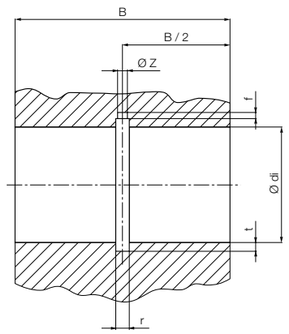
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.000 +0.020	12	28	3.0	0.8	2.5	1.08	**A180UM-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.47	**A180UM-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	2.16	**A180UM-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.80	**A180UM-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	8.07	**A180UM-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	14.65	**A180UM-01-30**
35	+0.040 +0.085	39	69	5.0	0.8	4.0	17.84	**A180UM-01-35**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	22.70	**A180UM-01-40**
50	+0.050 +0.150	55	99	7.0	1.3	6.0	44.44	**A180UM-01-50**

Housing hole for A180UM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**A180UM-01-10**
12	14	32	3.0	1.0	1.5	3.1	**A180UM-01-12**
16	18	36	3.5	1.0	1.7	3.6	**A180UM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**A180UM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**A180UM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**A180UM-01-30**
35	39	70	5.0	1.0	2.0	4.1	**A180UM-01-35**
40	44	80	6.0	1.5	2.5	5.1	**A180UM-01-40**
50	55	100	7.0	1.5	2.5	6.1	**A180UM-01-50**



Can be combined with:

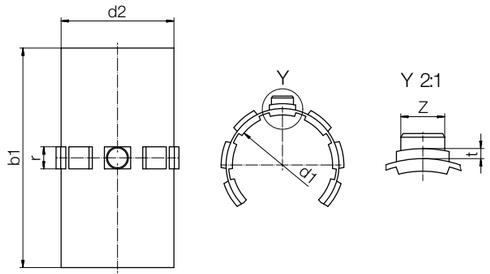

RJUM-01/-03
TJUM-01/-03


RJUM-06/-06-LL


FJUM-01/-02

drylin® R liners | Product range

Long, open design for supported shafts – made from iglidur® A180 (FDA-compliant)



Order key

Type	Size
A180 U M O-01-10	

iglidur® A180	Liner	Metric	Open	Standard	Inner Ø d1

The FDA-compliant for the food and pharmaceutical industry

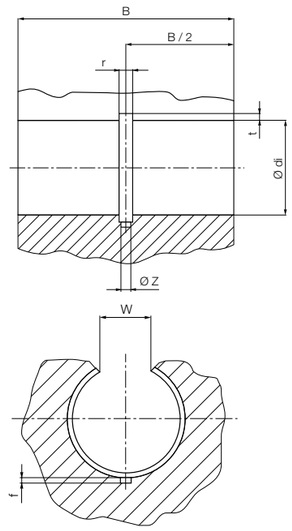
[78] According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance[78]	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.000 +0.020	12	28	3.0	0.8	2.5	1.08	**A180UMO-01-10**
12	+0.030 +0.070	14	31	3.0	0.8	3.0	1.47	**A180UMO-01-12**
16	+0.030 +0.070	18	35	3.5	0.8	3.5	2.16	**A180UMO-01-16**
20	+0.030 +0.070	23	44	5.0	0.8	3.5	4.80	**A180UMO-01-20**
25	+0.030 +0.070	28	57	5.0	0.8	4.0	8.07	**A180UMO-01-25**
30	+0.040 +0.085	34	67	5.0	0.8	4.0	14.65	**A180UMO-01-30**
35	+0.040 +0.085	39	69	5.0	0.8	4.0	17.84	**A180UMO-01-40**
40	+0.040 +0.085	44	79	6.0	1.3	5.0	22.70	**A180UMO-01-50**

Housing hole for A180UMO-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	W	r +0.5	t +0.05	f +0.1	Z +0.2	Part No.
10	12	29	7.3	3.0	1.0	1.0	2.6	**A180UMO-01-10**
12	14	32	9.0	3.0	1.0	1.5	3.1	**A180UMO-01-12**
16	18	36	11.6	3.5	1.0	1.7	3.6	**A180UMO-01-16**
20	23	45	12.0	5.0	1.0	2.0	3.6	**A180UMO-01-20**
25	28	58	14.5	5.0	1.0	2.0	4.1	**A180UMO-01-25**
30	34	68	16.6	5.0	1.0	2.0	4.1	**A180UMO-01-30**
40	44	80	21.0	6.0	1.5	2.5	5.1	**A180UMO-01-40**
50	55	100	25.5	7.0	1.5	2.5	6.1	**A180UMO-01-50**



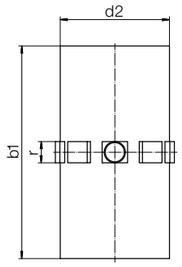
Can be combined with:

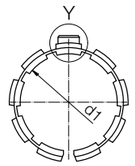

OJUM-01/-03
TJUM-01/-03

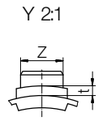

OJUM-06/-06-LL

drylin® R liners | Product range

Long, closed design for round shafts – made from iglidur® A160 (compliant with Regulation (EU) No. 10/2011 and FDA guidelines)







Order key

Type	Size
A160 U	M-01-10

iglidur® A160	Liner	Metric	Standard	Inner Ø d1

Compliant with Regulation (EU) No. 10/2011 and FDA guidelines for longer service life on hardened stainless steel shafts

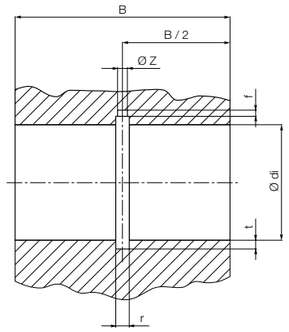
78) According to igus® testing method ▶ Page 1146
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

d1	d1 tolerance78)	d2	b1	r	t	Z	Weight [g]	Part No.
10	+0.03 +0.07	12	28	3.0	0.8	2.5	0.7	**A160UM-01-10**
12	+0.03 +0.07	14	31	3.0	0.8	3.0	1.0	**A160UM-01-12**
16	+0.03 +0.07	18	35	3.5	0.8	3.5	1.5	**A160UM-01-16**
20	+0.03 +0.07	23	44	5.0	0.8	3.5	3.3	**A160UM-01-20**
25	+0.03 +0.07	28	57	5.0	0.8	4.0	5.4	**A160UM-01-25**
30	+0.04 +0.09	34	67	5.0	0.8	4.0	9.9	**A160UM-01-30**
40	+0.04 +0.09	44	79	6.0	1.3	5.0	17.3	**A160UM-01-40**
50	+0.05 +0.15	55	99	7.0	1.3	6.0	36.3	**A160UM-01-50**

Housing hole for A160UM-01 | Dimensions [mm]

Shaft Ø	di H7	B h10	r +0.05	t +0.1	f +0.5	Z +0.2	Part No.
10	12	29	3.0	1.0	1.0	2.6	**A160UM-01-10**
12	14	32	3.0	1.0	1.5	3.1	**A160UM-01-12**
16	18	36	3.5	1.0	1.7	3.6	**A160UM-01-16**
20	23	45	5.0	1.0	2.0	3.6	**A160UM-01-20**
25	28	58	5.0	1.0	2.0	4.1	**A160UM-01-25**
30	34	68	5.0	1.0	2.0	4.1	**A160UM-01-30**
40	44	80	6.0	1.5	2.5	5.1	**A160UM-01-40**
50	55	100	7.0	1.5	2.5	6.1	**A160UM-01-50**



Can be combined with:


RJUM-01/-03
TJUM-01/-03

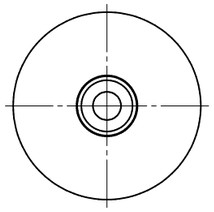

RJUM-06/-06-LL

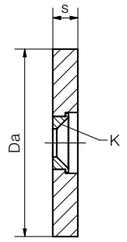

FJUM-01/-02

My sketches

drylin® R sliding discs | Product range

Large force displacement on different surfaces





Order key

Type	Size
RSD J-40-06	

Slide disc | iglidur® J | Outer Ø | Width

- Made from the high-performance plastic iglidur® J
- Low coefficient of friction
- Screw through the reinforced hole in the middle for a firm hold

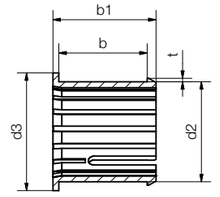
Min. –50°C
Max. +90°C

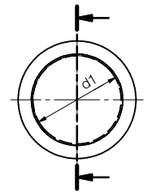
Dimensions [mm]

Outer Ø Da	Wear limit	Width s	K For countersunk screw	Max. static load capacity [N]	Part No.
40	1.5	6 ± 0.05	M6	28,500	**RSDJ-40-06**
60	2.5	8 ± 0.05	M8	66,000	**RSDJ-60-08**
80	2.5	8 ± 0.05	M8	120,000	**RSDJ-80-08**

drylin® R clip in | Product range

Clip-on liners





Order key

Type	Size
J U C M-1216-16	

iglidur® J | Liner | Clip-on | Metric | Inner Ø d1 | Outer Ø d2 | Length b

- Quick installation by hand for sheet thicknesses of 12 to 30mm
- No locating spigot required

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Min. –50°C
Max. +90°C

Dimensions [mm]

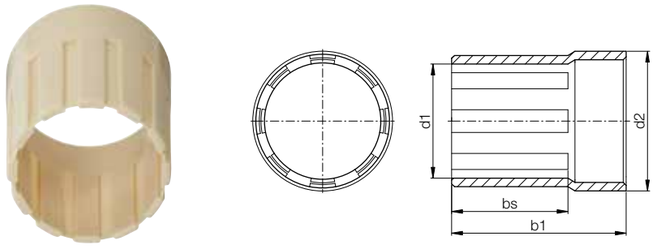
d1	d2	d3	b +0.05 / +0.25	b1	t	Part No.
12	16	20	16	20.5	0.8	**JUCM-1216-16**
14	18	22	18	22.5	0.8	**JUCM-1418-18**
15	17	22	15	18.0	0.8	**JUCM-1517-15** New
16	20	25	20	24.5	0.8	**JUCM-1620-20**
18	22	26	20	24.5	0.8	**JUCM-1822-20**
20	24	30	25	30.0	1.0	**JUCM-2024-25**
22	27	34	27	32.0	1.0	**JUCM-2227-27**
22	27	32	34	39.5	1.0	**JUCM-2227-34**
25	29	35	30	35.5	1.0	**JUCM-2529-30**
30	34	40	30	35.0	1.2	**JUCM-3034-30**

Technical data

Part No.	d1 tolerance[78] [mm]	Fmax. dynamic[82] p = 5MPa [N]	Fmax. static[82] p = 35MPa [N]	Weight [g]
JUCM-1216-16	+0.04 +0.10	320	1,600	2.5
JUCM-1418-18	+0.04 +0.10	440	2,200	2.9
JUCM-1517-15	+0.04 +0.10	380	1,900	1.4
JUCM-1620-20	+0.04 +0.10	560	2,800	3.9
JUCM-1822-20	+0.04 +0.10	630	3,150	4.2
JUCM-2024-25	+0.04 +0.12	880	4,400	5.8
JUCM-2227-27	+0.04 +0.12	1,000	5,000	9.4
JUCM-2227-34	+0.04 +0.12	1,300	6,500	10.3
JUCM-2529-30	+0.04 +0.12	1,300	6,500	8.6
JUCM-3034-30	+0.04 +0.12	1,500	7,500	10.0

drylin® R press-fit bearings | Product range

Made from iglidur® L100



Order key

Type	Size
W L M	-0608-10

iglidur® L100	L1 series	Metric	Inner Ø d1	Outer Ø d2	Length

- Extreme wear resistance
- Low coefficient of friction

[80] Measured with plug gauge

Please note: Installation instructions ▶ Page 1079

Material properties ▶ Page 1654

Min. –40°C

Max. +100°C

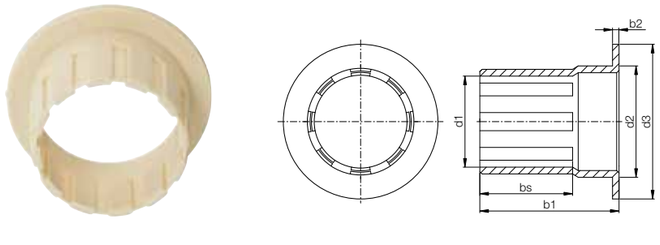
Dimensions [mm]

d1	d1 tolerance[80]	d2	b1	bs	Part No.
6	+0.000 +0.040	8	10	6	**WLM-0608-10**
8	+0.000 +0.050	10	12	8	**WLM-0810-12**
10	+0.000 +0.050	12	14.5	10	**WLM-1012-14**
10	+0.000 +0.050	12	16	10	**WLM-1012-16**
12	+0.000 +0.050	14	16	10	**WLM-1214-16**
12	+0.000 +0.050	14	25	15	**WLM-1214-25**
16	+0.000 +0.050	18	18	10	**WLM-1618-18**
16	+0.000 +0.050	18	26	16	**WLM-1618-26**
20	+0.000 +0.060	23	22.5	12.5	**WLM-2023-22**
20	+0.000 +0.060	23	30	20	**WLM-2023-30**
22	+0.000 +0.060	25	30	20	**WLM-2225-30**
25	+0.000 +0.060	28	29	19	**WLM-2528-29**
25	+0.000 +0.060	28	35	25	**WLM-2528-35**
30	+0.000 +0.060	34	34	24	**WLM-3034-34**
30	+0.000 +0.060	34	40	30	**WLM-3034-40**
40	+0.000 +0.060	44	40	30	**WLM-4044-40**
40	+0.000 +0.060	44	50	40	**WLM-4044-50**
50	+0.000 +0.070	55	50	40	**WLM-5055-50**
50	+0.000 +0.070	55	60	50	**WLM-5055-60**

drylin® R shaft guides

drylin® R press-fit bearings | Product range

Made from iglidur® L100



Order key

Type	Size
W L F M	-1214-15

iglidur® L100	L1 series	With flange	Metric	Inner Ø d1	Outer Ø d2	Length

- Extreme wear resistance
- Low coefficient of friction

[80] Measured with plug gauge

Please note: Installation instructions ▶ Page 1079

Material properties ▶ Page 1654

Min. –40°C

Max. +100°C

Dimensions [mm]

d1	d1 tolerance[80]	d2	d3	b1	b2	bs	Part No.
12	+0.000 +0.050	14	20	15.0	1.0	9	**WLFM-1214-15**
16	+0.000 +0.050	18	24	16.0	1.0	10	**WLFM-1618-16**
20	+0.000 +0.060	23	30	16.5	1.5	10	**WLFM-2023-16**
25	+0.000 +0.060	28	35	21.5	1.5	11	**WLFM-2528-21**
30	+0.000 +0.060	34	42	27.0	2.0	15	**WLFM-3034-27**
40	+0.000 +0.060	44	52	32.0	2.0	20	**WLFM-4044-32**
50	+0.000 +0.070	55	63	37.5	2.5	25	**WLFM-5055-37**

drylin® R solid plastic bearings | Product range

Standard design made from iglidur® J (the all-rounder)

Order key

Type	Size
R J M	-01-10

Closed | iglidur® J | Metric | Standard | Inner Ø d1

- Assembly by press-fitting
- Secured by circlips

Min. –20°C
Max. +60°C

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
[83] Applies by room temperature: press-fit decrease with time depending on the temperature
Please note: Installation instructions ▶ Page 1079
Imperial dimensions ▶ Page 1613

Dimensions [mm]

d1	d2	B	B1	s	dn	Part No.
8	16	25	16.2	1.10	15.2	**RJM-01-08**
10	19	29	21.6	1.30	17.5	**RJM-01-10**
12	22	32	22.6	1.30	20.5	**RJM-01-12**
16	26	36	24.6	1.30	24.2	**RJM-01-16**
20	32	45	31.2	1.60	29.6	**RJM-01-20**
25	40	58	43.7	1.85	36.5	**RJM-01-25**
30	47	68	51.7	1.85	43.5	**RJM-01-30**
40	62	80	60.3	2.15	57.8	**RJM-01-40**

Technical data

Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 2.5MPa	Fmax. static[82] p = 17.5MPa	Weight	Press-fit force[83]
	[mm]	[N]	[N]	[g]	[N]
RJM-01-08	+0.025 +0.061	250	1,750	4	400
RJM-01-10	+0.025 +0.061	363	2,538	7	700
RJM-01-12	+0.032 +0.075	480	3,360	9	1,300
RJM-01-16	+0.032 +0.075	720	5,040	13	1,100
RJM-01-20	+0.040 +0.092	1,125	7,875	24	1,500
RJM-01-25	+0.040 +0.092	1,813	12,688	47	3,500
RJM-01-30	+0.040 +0.092	2,550	17,850	72	4,500
RJM-01-40	+0.050 +0.112	4,000	28,000	127	4,200

Can be combined with:


RQA-04


RTA-04


RGA-04


RGAS-04

drylin® R solid plastic bearings | Product range

Standard design, precise, made from iglidur® J (the all-rounder)

Order key

Type	Size
R J M P	-01-10

Closed | iglidur® J | Metric | Precise | Standard | Inner Ø d1

- Easy assembly by soft press-fit
- Reduced bearing clearance
- Secured by circlips

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Min. –20°C
Max. +60°C
Imperial dimensions ▶ Page 1613

Dimensions [mm]

d1	d2	B	B1	s	dn	Part No.
6	12	19	13.5	1.10	11.5	**RJMP-01-06**
8	16	25	16.2	1.10	15.2	**RJMP-01-08**
10	19	29	21.6	1.30	17.5	**RJMP-01-10**
12	22	32	22.6	1.30	20.5	**RJMP-01-12**
16	26	36	24.6	1.30	24.2	**RJMP-01-16**
20	32	45	31.2	1.60	29.6	**RJMP-01-20**
25	40	58	43.7	1.85	36.5	**RJMP-01-25**
30	47	68	51.7	1.85	43.5	**RJMP-01-30**

Technical data

Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 2.5MPa	Fmax. static[82] p = 17.5MPa	Weight
	[mm]	[N]	[N]	[g]
RJMP-01-06	+0.000 +0.030	200	1,400	2
RJMP-01-08	+0.000 +0.040	250	1,750	4
RJMP-01-10	+0.000 +0.040	363	2,538	7
RJMP-01-12	+0.000 +0.040	480	3,360	9
RJMP-01-16	+0.000 +0.040	720	5,040	13
RJMP-01-20	+0.000 +0.040	1,125	7,875	24
RJMP-01-25	+0.000 +0.050	1,813	12,688	47
RJMP-01-30	+0.000 +0.050	2,550	17,850	72

Can be combined with:


RQA-04


RTA-04


RGA-04


RGAS-04

drylin® R solid plastic bearings | Product range

Linear plain bearings with Japanese dimensions made from iglidur® J4

Order key

Type	Size
R J 4 J P-01-10	

Closed	iglidur® J4	Japan standard	Precise	Standard	Inner Ø d1

- Alternative to ball bearings with Japanese dimension
- Quickly assembled
- Secured by circlips

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Material properties ▶ Page 1652
Min. –20°C
Max. +60°C

Dimensions [mm]

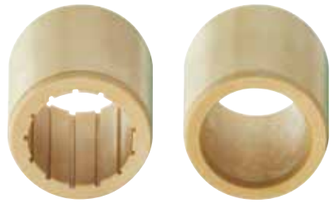
d1	d2	B	B1	s	dn	Part No.
8	15	24	17.5	1.1	14.3	**RJ4JP-01-08**
10	19	29	22.0	1.3	18.0	**RJ4JP-01-10**
12	21	30	23.0	1.3	20.0	**RJ4JP-01-12**
16	28	37	26.5	1.6	26.6	**RJ4JP-01-16**
20	32	42	30.5	1.6	30.3	**RJ4JP-01-20**
25	40	59	41.1	1.85	37.5	**RJ4JP-01-25**
30	45	64	44.6	1.85	42.5	**RJ4JP-01-30**

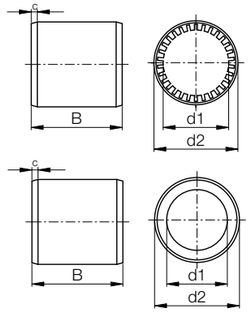
Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJ4JP-01-08	+0.000 +0.040	200	800	2
RJ4JP-01-10	+0.000 +0.040	300	1,200	6
RJ4JP-01-12	+0.000 +0.040	400	1,600	8
RJ4JP-01-16	+0.000 +0.040	700	2,800	16
RJ4JP-01-20	+0.000 +0.040	1,000	4,000	23
RJ4JP-01-25	+0.000 +0.050	1,550	6,500	47
RJ4JP-01-30	+0.000 +0.050	2,200	8,500	72

drylin® R solid plastic bearings | Product range

Low-cost linear plain bearings made from iglidur® J260





Order key

Type	Size
R J260 U M-02-12	

Closed	iglidur® J260	Grooved	Metric	Compact	Inner Ø d1

- 2 variations: RJ260M (with plain design) and RJ260UM (grooved structure)

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Min. –20°C
Max. +60°C

Dimensions [mm]

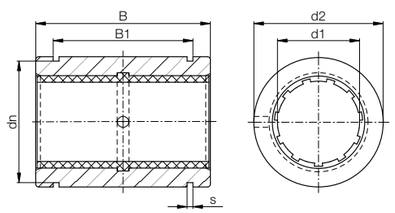
d1	d2	B	C	Part No.
12	19	28	1.5x15°	**RJ260UM-02-12**
16	24	30	1.5x15°	**RJ260UM-02-16**
20	28	30	2.0x15°	**RJ260UM-02-20**
25	35	40	2.0x15°	**RJ260UM-02-25**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 2.5MPa	Fmax. static82) p = 17.5MPa	Weight
	[mm]	[N]	[N]	[g]
RJ260UM-02-12	+0.035 +0.080	420	2,940	6.2
RJ260UM-02-16	+0.035 +0.080	600	4,200	9.7
RJ260UM-02-20	+0.040 +0.095	750	5,250	11.7
RJ260UM-02-25	+0.040 +0.095	1,250	8,750	22.8

drylin® R linear plain bearings | Product range

Closed, anodised aluminium adapter



Order key

Type						Size
R	J	U	M-	01-	10	
Closed	iglidur® J	Liner	Metric	Standard		Inner Ø d1

- Secured by circlips

78) According to igus® testing method ▶ Page 1146
81) Ø < 10mm use press-fitted sleeve plain bearings
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

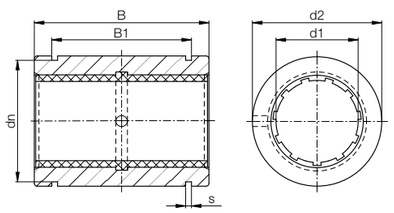
d1	d2	B	B1	s	dn	Part No.
	H7	h10	H10	H10	h10	
5	12	22	14.2	1.10	11.5	**RJZM-01-05**81)
6	12	22	14.2	1.10	11.5	**RJZM-01-06**81)
8	16	25	16.2	1.10	15.2	**RJZM-01-08**81)
10	19	29	21.6	1.30	17.5	**RJUM-01-10**
12	22	32	22.6	1.30	20.5	**RJUM-01-12**
16	26	36	24.6	1.30	24.2	**RJUM-01-16**
20	32	45	31.2	1.60	29.6	**RJUM-01-20**
25	40	58	43.7	1.85	36.5	**RJUM-01-25**
30	47	68	51.7	1.85	43.5	**RJUM-01-30**
40	62	80	60.3	2.15	57.8	**RJUM-01-40**
50	75	100	77.3	2.65	70.5	**RJUM-01-50**
60	90	125	101.7	3.15	86.5	**RJUM-01-60**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJZM-01-0581)	+0.025 +0.060	525	3,675	5
RJZM-01-0681)	+0.025 +0.060	525	3,675	5
RJZM-01-0881)	+0.032 +0.070	960	6,720	9
RJUM-01-10	+0.030 +0.088	725	5,075	14
RJUM-01-12	+0.030 +0.088	960	6,720	21
RJUM-01-16	+0.030 +0.088	1,440	10,080	28
RJUM-01-20	+0.030 +0.091	2,250	15,750	49
RJUM-01-25	+0.030 +0.091	3,625	25,375	108
RJUM-01-30	+0.040 +0.110	5,100	35,700	162
RJUM-01-40	+0.040 +0.115	8,000	56,000	334
RJUM-01-50	+0.050 +0.130	9,000	87,500	579
RJUM-01-60	+0.050 +0.140	12,000	120,000	1,070

drylin® R linear plain bearings | Product range

Closed, anodised aluminium adapter, precise



Order key

Type						Size
R	J	U	M-	11-	10	
Closed	iglidur® J	Liner	Metric	Precise		Inner Ø d1

- Max. bearing clearance reduced by 50%
- Secured by circlips

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	d2	B	B1	s	dn	Part No.
	H7	h10	H10	H10	h10	
10	19	29	21.6	1.30	17.5	**RJUM-11-10**
12	22	32	22.6	1.30	20.5	**RJUM-11-12**
16	26	36	24.6	1.30	24.2	**RJUM-11-16**
20	32	45	31.2	1.60	29.6	**RJUM-11-20**
25	40	58	43.7	1.85	36.5	**RJUM-11-25**
30	47	68	51.7	1.85	43.5	**RJUM-11-30**
40	62	80	60.3	2.15	57.8	**RJUM-11-40**
50	75	100	77.3	2.65	70.5	**RJUM-11-50**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUM-11-10	+0.000 +0.058	725	5,075	14
RJUM-11-12	+0.000 +0.058	960	6,720	21
RJUM-11-16	+0.000 +0.058	1,440	10,080	28
RJUM-11-20	+0.000 +0.061	2,250	15,750	49
RJUM-11-25	+0.000 +0.061	3,625	25,375	108
RJUM-11-30	+0.000 +0.075	5,100	35,700	162
RJUM-11-40	+0.000 +0.080	8,000	56,000	334
RJUM-11-50	+0.000 +0.090	12,500	87,500	579

Can be combined with:


RQA-01


RTA-01


RGA-01


RGAS-01

Available with drylin® liners (optional: J200/A180):

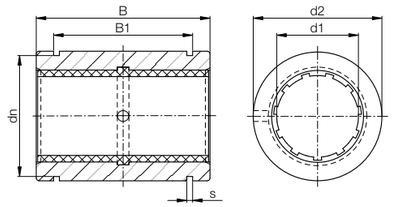

J


E7


X

drylin® R linear plain bearings | Product range

Closed stainless steel adapter made of stainless steel 303



Order key

Type					Size	Material
R	J	U	M-	01-12	-	ES
Closed	igliduR® J	Liner	Metric	Standard	Inner Ø d1	Stainless steel

- Secured by circlips

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	d2	B	B1	s	dn	Part No.
	H7	h10	H10	H10	h10	
12	22	32	22.6	1.30	20.5	**RJUM-01-12-ES**
16	26	36	24.6	1.30	24.2	**RJUM-01-16-ES**
20	32	45	31.2	1.60	29.6	**RJUM-01-20-ES**
25	40	58	43.7	1.85	36.5	**RJUM-01-25-ES**
30	47	68	51.7	1.85	43.5	**RJUM-01-30-ES**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUM-01-12-ES	+0.030 +0.088	960	6,720	60
RJUM-01-16-ES	+0.030 +0.088	1,440	10,080	84
RJUM-01-20-ES	+0.030 +0.091	2,250	15,750	147
RJUM-01-25-ES	+0.030 +0.091	3,625	25,375	324
RJUM-01-30-ES	+0.040 +0.110	5,100	35,700	486

Available with drylin® liners (optional: J200/A180):

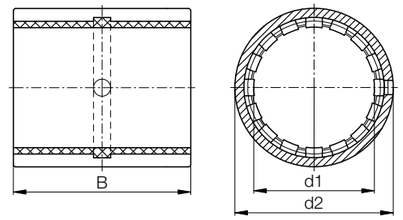

J


E7


X

drylin® R linear plain bearings | Product range

Closed, anodised aluminium adapter, short design



Order key

Type					Size
R	J	U	M-	02-10	
Closed	igliduR® J	Liner	Metric	Compact	Inner Ø d1

- Also available as a reduced clearance version RJUM-12 (Ø 10–50mm)

78) According to igus® testing method ▶ Page 1146
81) Ø < 10mm use press-fitted sleeve bearings
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

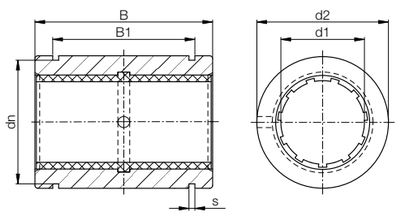
d1	d2	B	Part No.
	H7	h10	
6	12	22	**RJZM-02-06**81)
8	15	24	**RJZM-02-08**81)
10	17	26	**RJUM-02-10**
12	19	28	**RJUM-02-12**
16	24	30	**RJUM-02-16**
20	28	30	**RJUM-02-20**
25	35	40	**RJUM-02-25**
30	40	50	**RJUM-02-30**
40	52	60	**RJUM-02-40**
50	62	70	**RJUM-02-50**

Technical data

Part No.	Housing hole	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	Ø H7 [mm]	[mm]	[N]	[N]	[g]
RJZM-02-0681)	12	+0.032 +0.070	600	4,200	4
RJZM-02-0881)	15	+0.032 +0.070	650	4,550	6
RJUM-02-10	17	+0.030 +0.088	650	4,550	8
RJUM-02-12	19	+0.030 +0.088	840	5,880	10
RJUM-02-16	24	+0.030 +0.088	1,200	8,400	17
RJUM-02-20	28	+0.030 +0.091	1,500	10,500	18
RJUM-02-25	35	+0.030 +0.091	2,500	17,500	42
RJUM-02-30	40	+0.040 +0.110	3,750	26,250	56
RJUM-02-40	52	+0.040 +0.115	6,000	42,000	113
RJUM-02-50	62	+0.050 +0.130	8,750	61,250	147

drylin® R linear plain bearings | Product range

Closed, anodised aluminium adapters with iglidur® E7 liner



Order key

Type	Size
R E7 U M	01-10

Closed | iglidur® E7 | Liner | Metric | Standard | Inner Ø d1

● Secured by circlips

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

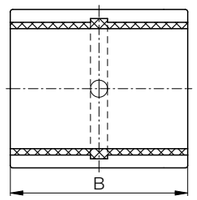
d1	d2	B	B1	s	dn	Part No.
	H7	h10	H10	H10	h10	
10	19	29	21.6	1.30	17.5	**RE7UM-01-10**
12	22	32	22.6	1.30	20.5	**RE7UM-01-12**
16	26	36	24.6	1.30	24.2	**RE7UM-01-16**
20	32	45	31.2	1.60	29.6	**RE7UM-01-20**
25	40	58	43.7	1.85	36.5	**RE7UM-01-25**
30	47	68	51.7	1.85	43.5	**RE7UM-01-30**
40	62	80	60.3	2.15	57.8	**RE7UM-01-40**
50	75	100	77.3	2.65	70.5	**RE7UM-01-50**
60	90	125	101.7	3.15	86.5	**RE7UM-01-60**

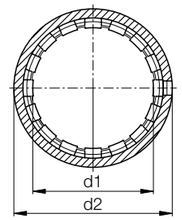
Technical data

Part No.	d1 tolerance 78)	F max. dynamic82) p = 2.5MPa	F max. static82) p = 18MPa	Weight
	[mm]	[N]	[N]	[g]
RE7UM-01-10	+0.030 +0.088	360	2,610	14
RE7UM-01-12	+0.030 +0.088	480	3,450	21
RE7UM-01-16	+0.030 +0.088	720	5,180	28
RE7UM-01-20	+0.030 +0.091	1,120	8,100	49
RE7UM-01-25	+0.030 +0.091	1,810	13,050	108
RE7UM-01-30	+0.040 +0.110	2,550	18,360	162
RE7UM-01-40	+0.040 +0.115	4,000	28,800	334
RE7UM-01-50	+0.050 +0.180	4,500	45,000	579
RE7UM-01-60	+0.050 +0.190	6,000	61,700	1,070

drylin® R linear plain bearings | Product range

Closed, anodised aluminium adapters, short design with iglidur® E7 liner





Order key

Type	Size
R E7 U M	02-10

Closed | iglidur® E7 | Liner | Metric | Compact | Inner Ø d1

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

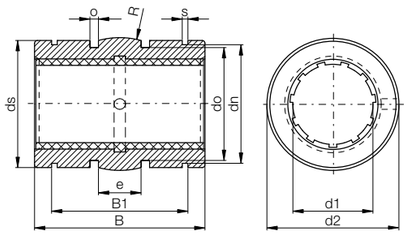
d1	d2	B	Part No.
	H7	h10	
10	17	26	**RE7UM-02-10**
12	19	28	**RE7UM-02-12**
16	24	30	**RE7UM-02-16**
20	28	30	**RE7UM-02-20**
25	35	40	**RE7UM-02-25**
30	40	50	**RE7UM-02-30**
40	52	60	**RE7UM-02-40**
50	62	70	**RE7UM-02-50**

Technical data

Part No.	Housing hole	d1 tolerance78)	F max. dynamic82) p = 2.5MPa	F max. static82) p = 18MPa	Weight
	Ø H7 [mm]	[mm]	[N]	[N]	[g]
RE7UM-02-10	17	+0.030 +0.088	325	2,340	8
RE7UM-02-12	19	+0.030 +0.088	420	3,020	10
RE7UM-02-16	24	+0.030 +0.088	600	4,320	17
RE7UM-02-20	28	+0.030 +0.091	750	5,400	18
RE7UM-02-25	35	+0.030 +0.091	1,250	9,000	42
RE7UM-02-30	40	+0.040 +0.110	1,875	13,500	56
RE7UM-02-40	52	+0.040 +0.115	3,000	21,600	113
RE7UM-02-50	62	+0.050 +0.180	4,375	31,500	147

drylin® R linear plain bearings | Product range

Closed aluminium adapter (floating bearing)



Order key

Type						Size	
R	J	U	M	-03		-10	
Closed	iglidur® J	Liner	Metric	Self-aligning		Inner Ø d1	

- With reduced outer diameter, spherical area on the outer diameter, O-rings for elastic seating and hard-anodised surface

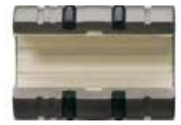
78) According to igus® testing method ▶ Page 1146
81) Ø < 10mm use press-fitted sleeve plain bearings
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Floating bearing ▶ Page 1078
Imperial dimensions ▶ Page 1615

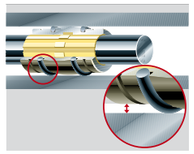
Dimensions [mm]

d1	d2	B	B1	s	dn	ds	do	o	e	R	Part No.
	H7	h10	H10	H10	h10	h10		+0.1			
8	15.8	24.9	16.4	1.10	15.0	15.5	13.2	1.86	5.0	20.0	**RJZM-03-08**[81]
10	18.8	28.9	21.8	1.30	17.5	18.5	15.4	1.86	5.0	13.0	**RJUM-03-10**
12	21.8	31.9	22.8	1.30	20.5	21.5	18.4	1.86	6.0	18.0	**RJUM-03-12**
16	25.8	35.9	24.9	1.30	24.2	25.5	20.4	2.86	8.0	32.0	**RJUM-03-16**
20	31.8	44.8	31.5	1.60	29.6	31.5	26.4	2.86	10.0	50.0	**RJUM-03-20**
25	39.8	57.8	44.1	1.85	36.5	39.0	34.4	2.86	12.5	39.0	**RJUM-03-25**
30	46.7	67.8	52.1	1.85	43.5	46.0	41.4	2.86	15.0	57.0	**RJUM-03-30**
40	61.7	79.8	60.9	2.15	57.8	61.0	56.4	2.86	20.0	100.0	**RJUM-03-40**
50	74.7	99.8	78.0	2.65	70.5	74.0	69.4	2.86	25.0	157.0	**RJUM-03-50**

Technical data

Part No.	Housing hole	d1 tolerance[78]	F max. dynamic[82]	Fmax. static[82]	Weight
			p = 5MPa	p = 35MPa	
	Ø H7 [mm]	[mm]	[N]	[N]	[g]
RJZM-03-08[81]	16	+0.032 +0.070	960	6,720	8
RJUM-03-10	19	+0.030 +0.088	725	5,075	11
RJUM-03-12	22	+0.030 +0.088	960	6,720	17
RJUM-03-16	26	+0.030 +0.088	1,440	10,080	23
RJUM-03-20	32	+0.030 +0.091	2,250	15,750	44
RJUM-03-25	40	+0.030 +0.091	3,625	25,375	92
RJUM-03-30	47	+0.040 +0.110	5,100	35,700	145
RJUM-03-40	62	+0.040 +0.115	8,000	56,000	311
RJUM-03-50	75	+0.050 +0.150	12,500	87,500	542





Can be combined with:


RQA-03


RTA-03


RGA-03


RGAS-03

Available with drylin® liners (optional: J200/A180):

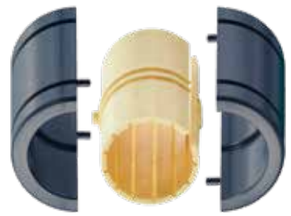

J

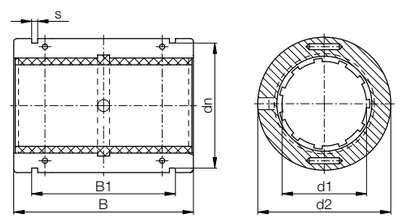

E7


X

drylin® R linear plain bearings | Product range

Split anodised aluminium adapter





Order key

Type						Size	
T	J	U	M	-01		-10	
Open	iglidur® J	Liner	Metric	Standard		Inner Ø d1	

- Quick replacement of the liner without removing the shaft

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Imperial dimensions ▶ Page 1616

Dimensions [mm]

d1	d2	B	B1	s	dn	Part No.
	H7	h10	H10	H10	h10	
10	19 –0.020 –0.040	29	21.6	1.30	17.5	**TJUM-01-10**
12	22 –0.020 –0.040	32	22.6	1.30	20.5	**TJUM-01-12**
16	26 –0.020 –0.040	36	24.6	1.30	24.2	**TJUM-01-16**
20	32 –0.020 –0.045	45	31.2	1.60	29.6	**TJUM-01-20**
25	40 –0.030 –0.055	58	43.7	1.85	36.5	**TJUM-01-25**
30	47 –0.030 –0.055	68	51.7	1.85	43.5	**TJUM-01-30**
40	62 –0.030 –0.060	80	60.3	2.15	57.8	**TJUM-01-40**
50	75 –0.030 –0.060	100	77.3	2.65	70.5	**TJUM-01-50**

Technical data

Part No.	d1 tolerance[78]	Fmax. dynamic[82]	Fmax. static[82]	Weight
		p = 5MPa	p = 35MPa	
	[mm]	[N]	[N]	[g]
TJUM-01-10	+0.030 +0.092	725	5,075	14
TJUM-01-12	+0.030 +0.097	960	6,720	19
TJUM-01-16	+0.030 +0.097	1,440	10,080	27
TJUM-01-20	+0.030 +0.103	2,250	15,750	49
TJUM-01-25	+0.030 +0.103	3,625	25,375	106
TJUM-01-30	+0.040 +0.124	5,100	35,700	166
TJUM-01-40	+0.040 +0.124	8,000	56,000	347
TJUM-01-50	+0.050 +0.196	12,500	87,500	577

Can be combined with:


RQA-01


RTA-01


RGA-01


RGAS-01

Available with drylin® liners (optional: J200/A180):

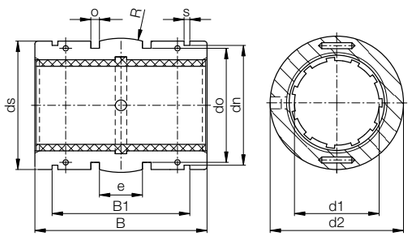

J


E7


X

drylin® R linear plain bearings | Product range

Split aluminium adapter (floating bearing)



Order key

Type						Size	
T	J	U	M	-	03	-	10
Open	iglidur® J	Liner	Metric	Self-aligning		Inner Ø d1	

- Split aluminium adapter with spherical middle area for automatic compensation of misalignments and O-rings for elastic seating

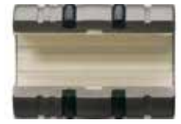
78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Floating bearing ▶ Page 1078
Imperial dimensions ▶ Page 1616

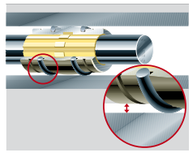
Dimensions [mm]

d1	d2	B	B1	s	dn	ds	do	o	e	R	Part No.
	H7	h10	H10	H10	h10	h10		+0.1			
10	19 –0.020 –0.040	28.9	21.8	1.30	17.5	18.5	15.4	1.86	5.0	13.0	**TJUM-03-10**
12	22 –0.020 –0.040	31.9	22.8	1.30	20.5	21.5	18.4	1.86	6.0	18.0	**TJUM-03-12**
16	26 –0.020 –0.040	35.9	24.9	1.30	24.2	25.5	20.4	2.86	8.0	32.0	**TJUM-03-16**
20	32 –0.020 –0.045	44.8	31.5	1.60	29.6	31.5	26.4	2.86	10.0	50.0	**TJUM-03-20**
25	40 –0.030 –0.055	57.8	44.1	1.85	36.5	39.0	34.4	2.86	12.5	39.0	**TJUM-03-25**
30	47 –0.030 –0.055	67.8	52.1	1.85	43.5	46.0	41.4	2.86	15.0	57.0	**TJUM-03-30**
40	62 –0.030 –0.060	79.8	60.9	2.15	57.8	61.0	56.4	2.86	20.0	100.0	**TJUM-03-40**
50	75 –0.030 –0.060	99.8	78.0	2.65	70.5	74.0	69.4	2.86	25.0	157.0	**TJUM-03-50**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
TJUM-03-10	+0.030 +0.092	725	5,075	11
TJUM-03-12	+0.030 +0.097	960	6,720	17
TJUM-03-16	+0.030 +0.097	1,440	10,080	23
TJUM-03-20	+0.030 +0.103	2,250	15,750	44
TJUM-03-25	+0.030 +0.103	3,625	25,375	92
TJUM-03-30	+0.040 +0.124	5,100	35,700	145
TJUM-03-40	+0.040 +0.124	8,000	56,000	311
TJUM-03-50	+0.050 +0.196	12,500	87,500	542





Can be combined with:


RQA-03


RTA-03


RGA-03


RGAS-03

Available with drylin® liners (optional: J200/A180):

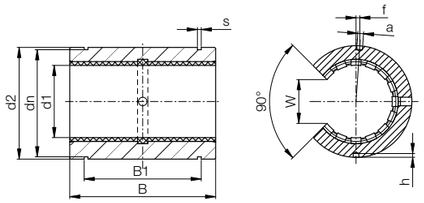

J

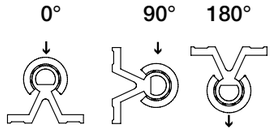

E7


X

drylin® R linear plain bearings | Product range

Open, anodised aluminium adapters – for supported shafts





Order key

Type						Size	
O	J	U	M	-	01	-	10
Open	iglidur® J	Liner	Metric	Standard		Inner Ø d1	

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Imperial dimensions ▶ Page 1614

Dimensions [mm]

d1	d2	B	W	a	dn	B1	s	f	h	Part No.
	H7	h10	–1	+0.1	h10	H10	H10	±0.2	-0.5	
10	19	29	7.3	0.0	17.5	21.6	1.30	0	1.2	**OJUM-01-10**
12	22	32	9.0	3.0	20.5	22.6	1.30	1.33 (7°)	1.2	**OJUM-01-12**
16	26	36	11.6	2.2	24.2	24.6	1.30	0	1.2	**OJUM-01-16**
20	32	45	12.0	2.2	29.6	31.2	1.60	0	1.2	**OJUM-01-20**
25	40	58	14.5	3.0	36.5	43.7	1.85	–1.5 (–4.3°)	1.5	**OJUM-01-25**
30	47	68	16.6	3.0	43.5	51.7	1.85	2 (4.9°)	2.0	**OJUM-01-30**
40	62	80	21.0	3.0	57.8	60.3	2.15	1.5 (2.8°)	2.0	**OJUM-01-40**
50	75	100	25.5	5.0	70.5	77.3	2.65	2.5 (3.8°)	2.0	**OJUM-01-50**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa			Fmax. static82) p = 35MPa			Weight
		0°	90°	180°	0°	90°	180°	[g]
OJUM-01-10	+0.030 +0.088	725	500	196	5,075	3,500	1,370	11
OJUM-01-12	+0.030 +0.088	960	635	240	6,720	4,445	1,680	15
OJUM-01-16	+0.030 +0.088	1,440	990	396	10,080	6,943	2,772	21
OJUM-01-20	+0.030 +0.091	2,250	1,800	900	15,750	12,600	6,300	42
OJUM-01-25	+0.030 +0.091	3,625	2,953	1,523	25,375	20,670	10,658	70
OJUM-01-30	+0.040 +0.110	5,100	4,250	2,278	35,700	29,735	15,946	132
OJUM-01-40	+0.040 +0.115	8,000	6,810	3,800	56,000	47,660	26,660	278
OJUM-01-50	+0.050 +0.150	12,500	10,750	6,125	87,500	75,265	42,875	479

Can be combined with:


RQA-01


RTA-01


RGA-01


RGAS-01

Available with drylin® liners (optional: J200/A180):

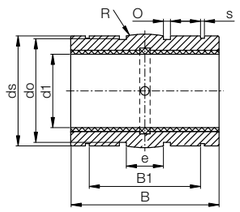

J

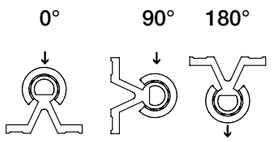

E7

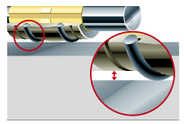

X

drylin® R linear plain bearings | Product range

Open, anodised aluminium adapter, floating bearing







- With reduced outer diameter, spherical area on the outer diameter, O-rings for elastic seating and hard-anodised surface

Order key

Type	Size
O J U M	-03-10

Open | igliduR® J | Liner | Metric | Self-aligning | Inner Ø d1

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Imperial dimensions ▶ Page 1614

Dimensions [mm]

d1	d2	ds	e	o	do	B1	s	B	R	W	a	f	h	Part No.
	H7	h10		+0.1		H10	H10	h10		–1	+0.1	±0.2	–0.5	
10	18.8	18.5	5.0	1.86	15.4	21.8	1.30	28.9	13.0	7.3	0.0	0	1.2	**OJUM-03-10**
12	21.8	21.5	6.0	1.86	18.4	22.8	1.30	31.9	18.0	9.0	3.0	1.33 (7°)	1.2	**OJUM-03-12**
16	25.8	25.5	8.0	2.86	20.4	24.9	1.30	35.9	32.0	11.6	2.2	0	1.2	**OJUM-03-16**
20	31.8	31.5	10.0	2.86	26.4	31.5	1.60	44.8	50.0	12.0	2.2	0	1.2	**OJUM-03-20**
25	39.8	39.0	12.5	2.86	34.4	44.1	1.85	57.8	39.0	14.5	3.0	–1.5 (–4.3°)	1.5	**OJUM-03-25**
30	46.7	46.0	15.0	2.86	41.4	52.1	1.85	67.8	57.0	16.6	3.0	2 (4.9°)	2	**OJUM-03-30**
40	61.7	61.0	20.0	2.86	56.4	60.9	2.15	79.8	100.0	21.0	3.0	1.5 (2.8°)	2	**OJUM-03-40**
50	74.7	74.0	25.0	2.86	69.4	78.0	2.65	99.8	157.0	25.5	5.0	2.5 (3.8°)	2	**OJUM-03-50**

Technical data

Part No.	Housing hole	d1 tolerance[78]	Fmax. dynamic[82] p = 5MPa			Fmax. static[82] p = 35MPa			Weight
	Ø H7 [mm]		0°	90°	180°	0°	90°	180°	[g]
OJUM-03-10	19	+0.030 +0.088	725	500	196	5,075	3,500	1,370	10
OJUM-03-12	22	+0.030 +0.088	960	635	240	6,720	4,445	1,680	13
OJUM-03-16	26	+0.030 +0.088	1,440	990	396	10,080	6,943	2,772	19
OJUM-03-20	32	+0.030 +0.091	2,250	1,800	900	15,750	12,600	6,300	38
OJUM-03-25	40	+0.030 +0.091	3,625	2,953	1,523	25,375	20,670	10,658	63
OJUM-03-30	47	+0.040 +0.110	5,100	4,250	2,278	35,700	29,735	15,946	119
OJUM-03-40	62	+0.040 +0.115	8,000	6,810	3,800	56,000	47,660	26,600	250
OJUM-03-50	75	+0.050 +0.150	12,500	10,750	6,125	87,500	75,265	42,875	431

Can be combined with:


RQA-03


RTA-03


RGA-03


RGAS-03

Available with drylin® liners (optional: J200/A180):


J

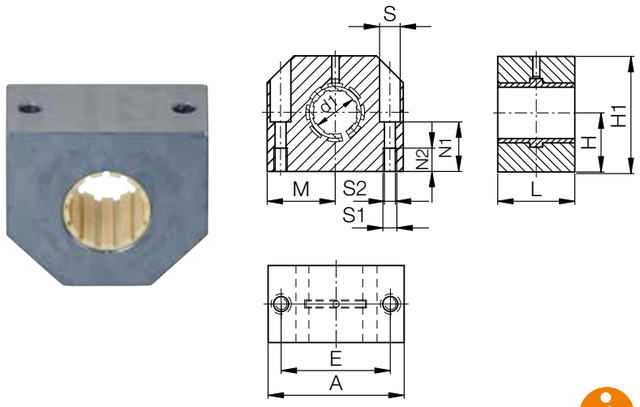

E7


X

My sketches

drylin® R pillow blocks | Product range

Closed, anodised aluminium housing, short design



Order key

Type	Size
R J U M-05-10	

Closed | igliduR® J | Liner | Metric | Compact | Inner Ø d1

[78] According to igus® testing method ▶ Page 1146
[81] Ø < 10mm use press-fitted sleeve bearings
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E	S	S1	S2	N1	N2	L	Part No.
	+0.01 –0.014				±0.15							
8	14	27	32	16.0	23	6.0	M4	3.4	13	9	24	**RJZM-05-08**[81]
10	16	33	40	20.0	29	8.0	M5	4.3	16	11	26	**RJUM-05-10**
12	17	33	40	20.0	29	8.0	M5	4.3	16	11	28	**RJUM-05-12**
16	19	38	45	22.5	34	8.0	M5	4.3	18	11	30	**RJUM-05-16**
20	23	45	53	26.5	40	9.5	M6	5.3	22	13	30	**RJUM-05-20**
25	27	54	62	31.0	48	11.0	M8	6.6	26	18	40	**RJUM-05-25**
30	30	60	67	33.5	53	11.0	M8	6.6	29	18	50	**RJUM-05-30**
40	39	76	87	43.5	69	15.0	M10	8.4	38	22	60	**RJUM-05-40**
50	47	92	103	51.5	82	18.0	M12	10.5	46	26	70	**RJUM-05-50**

Technical data

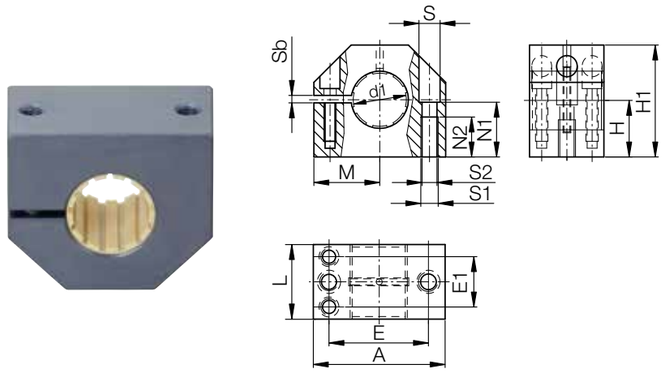
Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 5MPa	Fmax. static[82] p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJZM-05-08[81]	+0.032 +0.070	960	6,720	46
RJUM-05-10	+0.030 +0.088	650	4,550	71
RJUM-05-12	+0.030 +0.088	840	5,880	78
RJUM-05-16	+0.030 +0.088	1,200	8,400	106
RJUM-05-20	+0.030 +0.091	1,500	10,500	132
RJUM-05-25	+0.030 +0.091	2,500	17,500	253
RJUM-05-30	+0.040 +0.110	3,750	26,250	374
RJUM-05-40	+0.040 +0.115	6,000	42,000	713
RJUM-05-50	+0.050 +0.150	8,750	61,250	1,168

Available with drylin® liners (optional: J200/A180):

J | E7 | X

drylin® R pillow blocks | Product range

Adjustable anodised aluminium housing, short design



● With adjustable clearance

Order key

Type	Size
R J U M E-05-12	

Closed | igliduR® J | Liner | Metric | Adjustable | Compact | Inner Ø d1

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E	E1	S	S1	S2	Sb	N1	N2	L	Part No.
	+0.01 –0.014				±0.15	±0.15								
12	17	33	40	20.0	29	18.0	8.0	4.3	M5	2	16	11	28	**RJUME-05-12**
16	19	38	45	22.5	34	19.0	8.0	4.3	M5	2	18	11	30	**RJUME-05-16**
20	23	45	53	26.5	40	20.0	9.5	5.3	M6	2	22	13	30	**RJUME-05-20**
25	27	54	62	31.0	48	25.5	11.0	6.6	M8	2	26	18	40	**RJUME-05-25**
30	30	60	67	33.5	53	30.5	11.0	6.6	M8	2	29	18	50	**RJUME-05-30**
40	39	76	87	43.5	69	36.0	15.0	8.4	M10	2	38	22	60	**RJUME-05-40**
50	47	92	103	51.5	82	44.0	18.0	10.5	M12	2	46	26	70	**RJUME-05-50**

Technical data

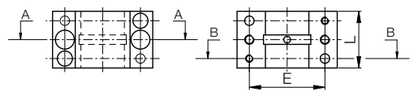
Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 5MPa	Fmax. static[82] p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUME-05-12	Adjustable	840	5,880	78
RJUME-05-16	Adjustable	1,200	8,400	106
RJUME-05-20	Adjustable	1,500	10,500	132
RJUME-05-25	Adjustable	2,500	17,500	253
RJUME-05-30	Adjustable	3,750	26,250	374
RJUME-05-40	Adjustable	6,000	42,000	713
RJUME-05-50	Adjustable	8,750	61,250	1,168

Available with drylin® liners (optional: J200/A180):

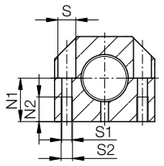
J | E7 | X

drylin® R pillow blocks | Product range

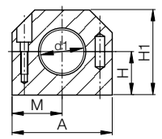
Split anodised aluminium housing, screwed, short design



Sectional view A



Sectional view B



Order key

Type						Size
T	J	U	M	-	05	-16
Open	iglidur® J	Liner	Metric	Compact		Inner Ø d1

- Replacement of the liner without removing the shaft

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H ±0.02	H1	A	M	E ±0.15	S	S1	S2	N1	N2	L	Part No.
16	19	38	45	22.5	34	8.0	M5	4.3	18	11	30	**TJUM-05-16**
20	23	45	53	26.5	40	9.5	M6	5.3	22	13	30	**TJUM-05-20**
25	27	54	62	31.0	48	11.0	M8	6.6	26	18	40	**TJUM-05-25**
30	30	60	67	33.5	53	11.0	M8	6.6	29	18	50	**TJUM-05-30**
40	39	76	87	43.5	69	15.0	M10	8.4	38	22	60	**TJUM-05-40**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
TJUM-05-16	+0.030 +0.120	1,200	8,400	105
TJUM-05-20	+0.030 +0.120	1,500	10,500	137
TJUM-05-25	+0.030 +0.120	2,500	17,500	253
TJUM-05-30	+0.040 +0.135	3,750	26,250	377
TJUM-05-40	+0.040 +0.135	6,000	42,000	720

Available with drylin® liners (optional: J200/A180):

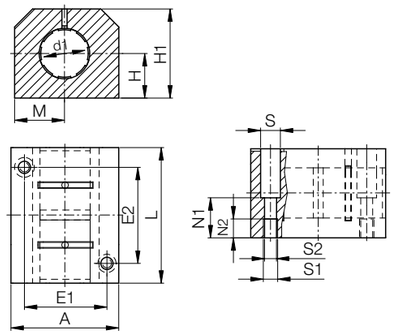

J


E7


X

drylin® R pillow blocks | Product range

Closed, anodised aluminium housing, tandem design



Order key

Type							Size
R	J	U	M	T	-	05	-12
Closed	iglidur® J	Liner	Metric	Tandem	Compact		Inner Ø d1

- Tandem design
- Equipped with two liners to increase the guide length

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H +0.01 –0.014	H1	A	M	E1 ±0.15	E2 ±0.15	S	S1	S2	N1	N2	L	Part No.
12	17	33	40	20	29	35	8.0	M5	4.3	16.0	11	60	**RJUMT-05-12**
16	19	38	45	22.5	34	40	8.0	M5	4.3	18.0	11	65	**RJUMT-05-16**
20	23	45	53	26.5	40	45	9.5	M6	5.3	22.0	13	65	**RJUMT-05-20**
25	27	54	62	31	48	55	11.0	M8	6.6	26.0	18	85	**RJUMT-05-25**
30	30	60	67	33.5	53	70	11.0	M8	6.6	29.0	18	105	**RJUMT-05-30**
40	39	76	87	43.5	69	85	15.0	M10	8.4	38.0	22	125	**RJUMT-05-40**
50	47	92	103	51.5	82	100	18.0	M12	10.5	46.0	26	145	**RJUMT-05-50**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUMT-05-12	+0.030 +0.088	840	5,880	170
RJUMT-05-16	+0.030 +0.088	1,200	8,400	250
RJUMT-05-20	+0.030 +0.091	1,500	10,500	300
RJUMT-05-25	+0.030 +0.091	2,500	17,500	550
RJUMT-05-30	+0.040 +0.110	3,750	26,250	750
RJUMT-05-40	+0.040 +0.115	6,000	42,000	1,500
RJUMT-05-50	+0.050 +0.150	8,750	61,250	2,400

Available with drylin® liners (optional: J200/A180):

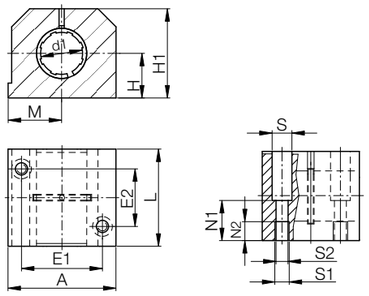

J


E7


X

drylin® R pillow blocks | Product range

Closed, anodised aluminium housing, long design



Order key

Type	Size
R J U M-06-12	

Closed | igliduR® J | Liner | Metric | Long design | Inner Ø d1

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E1	E2	S	S1	S2	N1	N2	L	Part No.
	+0.01 –0.014			±0.02	±0.15	±0.15							
12	18	35	43	21.5	32	23	8.0	M5	4.3	16.5	11	39	**RJUM-06-12**
16	22	42	53	26.5	40	26	10.0	M6	5.3	21.0	13	43	**RJUM-06-16**
20	25	50	60	30.0	45	32	11.0	M8	6.6	24.0	18	54	**RJUM-06-20**
25	30	60	78	39.0	60	40	15.0	M10	8.4	29.0	22	67	**RJUM-06-25**
30	35	70	87	43.5	68	45	15.0	M10	8.4	34.0	22	79	**RJUM-06-30**
40	45	90	108	54.0	86	58	18.0	M12	10.5	44.0	26	91	**RJUM-06-40**
50	50	105	132	66.0	108	50	20.0	M16	13.5	49.0	34	113	**RJUM-06-50**

Technical data

Part No.	d1 tolerance[78)]	Fmax. dynamic[82)] p = 5MPa	Fmax. static[82)] p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUM-06-12	+0.030 +0.088	960	6,720	121
RJUM-06-16	+0.030 +0.088	1,440	10,080	211
RJUM-06-20	+0.030 +0.091	2,250	15,750	323
RJUM-06-25	+0.030 +0.091	3,625	25,375	651
RJUM-06-30	+0.040 +0.110	5,100	35,700	1,050
RJUM-06-40	+0.040 +0.115	8,000	56,000	1,820
RJUM-06-50	+0.050 +0.150	12,500	87,500	3,250

Available with drylin® liners (optional: J200/A180):

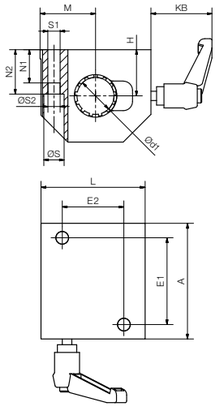

J

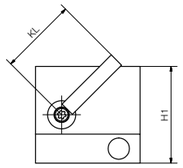

E7


X

drylin® R pillow blocks | Product range

Closed, anodised aluminium housing, long design with manual clamp





Order key

Type	Size	Options
R J U M-06-12-HK		

Closed | igliduR® J | Liner | Metric | Long design | Inner Ø d1 | Manual clamp

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E1	E2	S	S1	S2	N1	N2	W	L	KL	KB	Part No.
	+0.01; –0.014			±0.02	±0.15	±0.15							–1			
12	18	35	43	21.5	32	23	8	M5	4.3	16.5	11	10.2	39	40	33	**RJUM-06-12-HK**
16	22	42	53	26.5	40	26	10	M6	5.3	21	13	11.6	43	40	33	**RJUM-06-16-HK**
20	25	50	60	30	45	32	11	M8	6.6	24	18	12	54	40	33	**RJUM-06-20-HK**
25	30	60	78	39	60	40	15	M10	8.4	29	22	14.5	67	65	46	**RJUM-06-25-HK**
30	35	70	87	43.5	68	45	15	M10	8.4	34	22	16.6	79	65	46	**RJUM-06-30-HK**
40	45	90	108	54	86	58	18	M12	10.5	44	26	21	91	65	46	**RJUM-06-40-HK**
50	50	105	132	66	108	50	20	M16	13.5	49	34	25.5	113	65	46	**RJUM-06-50-HK**

Technical data

Part No.	d1 tolerance[78)]	Fmax. dynamic[82)] p = 5MPa	Fmax. static[82)] p = 35MPa	Clamp force axial	Weight
		0°	0°	[N]	[g]
RJUM-06-12-HK	+0.030 +0.088	960	6720	400	0.098
RJUM-06-16-HK	+0.030 +0.088	1440	10080	400	0.164
RJUM-06-20-HK	+0.030 +0.091	2250	15750	400	0.275
RJUM-06-25-HK	+0.030 +0.091	3625	25375	1,000	0.544
RJUM-06-30-HK	+0.040 +0.110	5100	35700	1,000	0.832
RJUM-06-40-HK	+0.040 +0.115	8000	56000	1,000	1.513
RJUM-06-50-HK	+0.050 +0.150	12500	87500	1,000	2.568

Available with drylin® liners (optional: J200/A180):

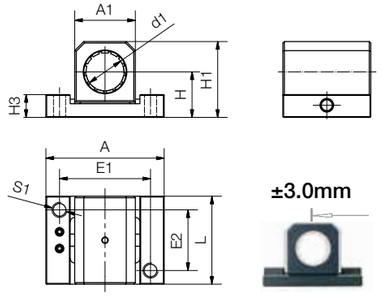

J


E7


X

drylin® R pillow blocks | Product range

Closed, anodised aluminium, floating pillow blocks



Order key

Type	Size	Options

R J U M-06-12 - LL

Closed	iglidur® J	Liner	Metric	Long design	Inner Ø d1	Floating bearing

- Compensation of parallelism errors up to 6mm
- Quick assembly even on raw profiles

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Floating bearing ▶ Page 1078

Dimensions [mm]

d1	H	H1	A	E1	E2	S1	L	A1	H3	Part No.
	±0.01			±0.15	±0.15					
12	18	28	43	32	23	M5	32	20	11	**RJUM-06-12 LL**
16	22	35	53	40	26	M6	36	26	11	**RJUM-06-16 LL**
20	25	41	60	45	32	M8	45	32	12.5	**RJUM-06-20 LL**
25	30	50	78	60	40	M10	58	40	15	**RJUM-06-25 LL**
30	35	59	87	68	45	M10	68	48	15	**RJUM-06-30 LL**
40	45	76	108	86	58	M12	80	62	20	**RJUM-06-40 LL**
50	50	89	132	108	50	M16	100	78	24	**RJUM-06-50 LL**

Technical data

Part No.	d1 tolerance78)	Fmax. static or dynamic82)	Weight
	[mm]	[N]	[g]
RJUM-06-12 LL	+0.030 +0.088	560	50
RJUM-06-16 LL	+0.030 +0.088	920	80
RJUM-06-20 LL	+0.030 +0.091	2,100	130
RJUM-06-25 LL	+0.030 +0.091	3,550	280
RJUM-06-30 LL	+0.040 +0.110	5,300	430
RJUM-06-40 LL	+0.040 +0.115	8,000	850
RJUM-06-50 LL	+0.050 +0.150	12,500	1,550

Available with drylin® liners (optional: J200/A180):

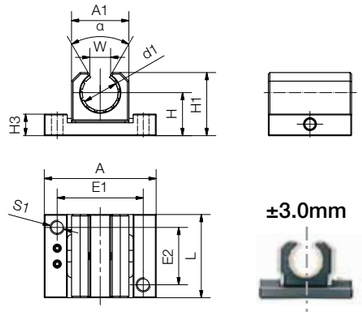

J

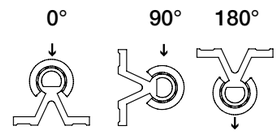

E7


X

drylin® R pillow blocks | Product range

Open, anodised aluminium, floating pillow blocks





- Compensation of parallelism errors up to 6mm

Order key

Type	Size	Options

O J U M-06-12 - LL

Open	iglidur® J	Liner	Metric	Long design	Inner Ø d1	Floating bearing

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079
Floating bearing ▶ Page 1078

Dimensions [mm]

d1	H	H1	A	E1	E2	S1	L	A1	H3	W	α	Part No.
	±0.01			±0.15	±0.15					–1	[°]	
12	18	24.5	43	32	23	M5	32	20	11	10.2	90	**OJUM-06-12 LL**
16	22	30.5	53	40	26	M6	36	26	11	11.6	90	**OJUM-06-16 LL**
20	25	37.0	60	45	32	M8	45	32	12.5	12.0	60	**OJUM-06-20 LL**
25	30	44.0	78	60	40	M10	58	40	15	14.5	60	**OJUM-06-25 LL**
30	35	52.5	87	68	45	M10	68	48	15	16.8	60	**OJUM-06-30 LL**
40	45	69.0	108	86	58	M12	80	62	20	21.0	60	**OJUM-06-40 LL**
50	50	80.0	132	108	50	M16	100	78	24	25.5	60	**OJUM-06-50 LL**

Technical data

Part No.	d1 tolerance78)	Fmax. static or dynamic82)	Fmax. static82) with load at 180°	Weight
	[mm]	[N]	[N]	[g]
OJUM-06-12 LL	+0.030 +0.088	560	240	40
OJUM-06-16 LL	+0.030 +0.088	920	400	70
OJUM-06-20 LL	+0.030 +0.091	2,100	900	115
OJUM-06-25 LL	+0.030 +0.091	3,550	1,520	240
OJUM-06-30 LL	+0.040 +0.110	5,100	2,280	370
OJUM-06-40 LL	+0.040 +0.115	8,000	3,800	750
OJUM-06-50 LL	+0.050 +0.150	12,500	6,100	1,400

Available with drylin® liners (optional: J200/A180):

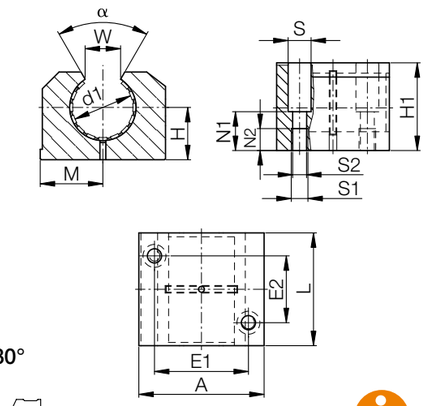

J

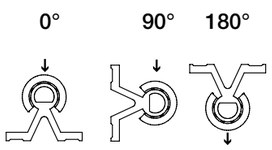

E7


X

drylin® R pillow blocks | Product range

Open, anodised aluminium housing, long design





Order key

Type	Size
O J U M-06-12	

Open | iglidur® J | Liner | Metric | Long design | Inner Ø d1

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E1	E2	S	S1	S2	N1	N2	W	α	L	Part No.
	+0.01; –0.014			±0.02	±0.15	±0.15						–1	[°]		
12	18	28	43	21.5	32	23	8.0	M5	4.3	16.5	11	10.2	78	39	**OJUM-06-12**
16	22	35	53	26.5	40	26	10.0	M6	5.3	21.0	13	11.6	78	43	**OJUM-06-16**
20	25	42	60	30.0	45	32	11.0	M8	6.6	24.0	18	12.0	60	54	**OJUM-06-20**
25	30	51	78	39.0	60	40	15.0	M10	8.4	29.0	22	14.5	60	67	**OJUM-06-25**
30	35	60	87	43.5	68	45	15.0	M10	8.4	34.0	22	16.6	57	79	**OJUM-06-30**
40	45	77	108	54.0	86	58	18.0	M12	10.5	44.0	26	21.0	56	91	**OJUM-06-40**
50	50	88	132	66.0	108	50	20.0	M16	13.5	49.0	34	25.5	54	113	**OJUM-06-50**

Technical data

Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 5MPa			Fmax. static[82] p = 35MPa			Weight
		0°	90°	180°	0°	90°	180°	[g]
OJUM-06-12	+0.030 +0.088	960	635	240	6,720	4,445	1,680	95
OJUM-06-16	+0.030 +0.088	1440	990	396	10,080	6,943	2,772	158
OJUM-06-20	+0.030 +0.091	2250	1,800	900	15,750	12,600	6,300	266
OJUM-06-25	+0.030 +0.091	3625	2,953	1,523	25,375	20,670	10,658	530
OJUM-06-30	+0.040 +0.110	5100	4,250	2,278	35,700	29,735	15,946	818
OJUM-06-40	+0.040 +0.115	8000	6,810	3,800	56,000	47,660	26,600	1,485
OJUM-06-50	+0.050 +0.150	12,500	10,750	6,125	87,500	75,265	42,875	2,750

Available with drylin® liners (optional: J200/A180):

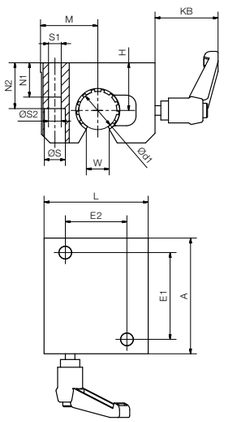

J

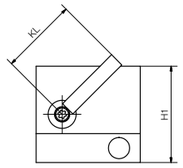

E7


X

drylin® R pillow blocks | Product range

Open, anodised aluminium housing, long design with manual clamp





Order key

Type	Size	Options
O J U M-06-12-HK		

Open | iglidur® J | Liner | Metric | Long design | Inner Ø d1 | Manual clamp

[78] According to igus® testing method ▶ Page 1146
[82] Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E1	E2	S	S1	S2	N1	N2	W	L	KL	KB	Part No.
	+0.01; –0.014			±0.02	±0.15	±0.15						–1				
12	18	28	43	21.5	32	23	8	M5	4.3	16.5	11	10.2	39	40	33	**OJUM-06-12-HK**
16	22	35	53	26.5	40	26	10	M6	5.3	21	13	11.6	43	40	33	**OJUM-06-16-HK**
20	25	42	60	30.0	45	32	11	M8	6.6	24	18	12.0	54	40	33	**OJUM-06-20-HK**
25	30	51	78	39.0	60	40	15	M10	8.4	29	22	14.5	67	65	46	**OJUM-06-25-HK**
30	35	60	87	43.5	68	45	15	M10	8.4	34	22	16.6	79	65	46	**OJUM-06-30-HK**
40	45	77	108	54.0	86	58	18	M12	10.5	44	26	21.0	91	65	46	**OJUM-06-40-HK**
50	50	88	132	66.0	108	50	20	M16	13.5	49	34	25.5	113	65	46	**OJUM-06-50-HK**

Technical data

Part No.	d1 tolerance[78]	Fmax. dynamic[82] p = 5MPa			Fmax. static[82] p = 35MPa			Clamp force axial	Weight
		0°	90°	180°	0°	90°	180°	[N]	[g]
OJUM-06-12-HK	+0.030 +0.088	960	635	240	6720	4445	1680	400	0.098
OJUM-06-16-HK	+0.030 +0.088	1440	990	396	10080	6943	2772	400	0.164
OJUM-06-20-HK	+0.030 +0.091	2250	1800	900	15750	12600	6300	400	0.275
OJUM-06-25-HK	+0.030 +0.091	3625	2953	1523	25375	20670	10658	1,000	0.544
OJUM-06-30-HK	+0.040 +0.110	5100	4250	2278	35700	29735	15946	1,000	0.832
OJUM-06-40-HK	+0.040 +0.115	8000	6810	3800	56000	47660	26600	1,000	1.513
OJUM-06-50-HK	+0.050 +0.150	12500	10750	6125	87500	75265	42875	1,000	2.568

Available with drylin® liners (optional: J200/A180):

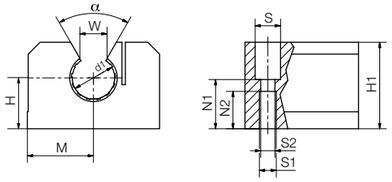

J

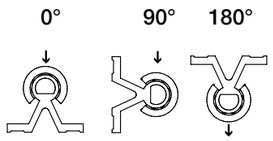

E7

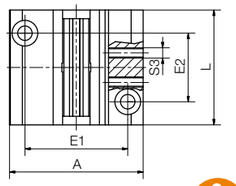

X

drylin® R pillow blocks | Product range

Open, anodised aluminium housing, long design, adjustable







● With two set screws (DIN 913), clearance adjustment possible

Order key

Type	Size

O J U M E-06-12

Open	iglidur® J	Liner	Metric	Adjustable	Long design	Inner Ø d1

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	H	H1	A	M	E1	E2	S	S1	S2	S3	N1	N2	W	α	L	Part No.
	+0.01; –0.014			±0.02	±0.15	±0.15							–1	[°]		
12	18	28	43	21.5	32	23	8.0	M5	4.3	M4	16.5	11	10.2	78	39	**OJUME-06-12**
16	22	35	53	26.5	40	26	10.0	M6	5.3	M4	21.0	13	11.6	78	43	**OJUME-06-16**
20	25	42	60	30.0	45	32	11.0	M8	6.6	M5	24.0	18	12.0	60	54	**OJUME-06-20**
25	30	51	78	39.0	60	40	15.0	M10	8.4	M6	29.0	22	14.5	60	67	**OJUME-06-25**
30	35	60	87	43.5	68	45	15.0	M10	8.4	M6	34.0	22	16.6	57	79	**OJUME-06-30**
40	45	77	108	54.0	86	58	18.0	M12	10.5	M8	44.0	26	21.0	56	91	**OJUME-06-40**
50	50	88	132	66.0	108	50	20.0	M16	13.5	M8	49.0	34	25.5	54	113	**OJUME-06-50**

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa			Fmax. static82) p = 35MPa			Weight
		0°	90°	180°	0°	90°	180°	[g]
OJUME-06-12	Adjustable	960	635	240	6,720	4,445	1,680	100
OJUME-06-16	Adjustable	1,440	990	396	10,080	6,943	2,772	160
OJUME-06-20	Adjustable	2,250	1,800	900	15,750	12,600	6,300	270
OJUME-06-25	Adjustable	3,625	2,953	1,523	25,375	20,670	10,658	530
OJUME-06-30	Adjustable	5,100	4,250	2,278	35,700	29,735	15,946	820
OJUME-06-40	Adjustable	8,000	6,810	3,800	56,000	47,660	26,600	1,490
OJUME-06-50	Adjustable	12,500	10,750	6,125	87,500	75,265	42,875	2,750

Available with drylin® liners (optional: J200/A180):


J

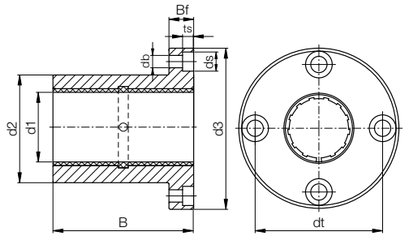

E7


X

My sketches

drylin® R flanged linear plain bearings | Product range

Closed, anodised aluminium adapter, round flange



78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	d2 h7	d3	dt	B	Bf	ts	db	ds	Part No.
8.0	16	32	24	25	8	3.1	3.5	6.0	**FJZM-01-08**
10.0	19	39	29	29	9	4.1	4.5	7.5	**FJUM-01-10**
10.4	19	39	29	29	9	4.1	4.5	7.5	**FJUM-01-10-LL**
12.0	22	42	32	32	9	4.1	4.5	7.5	**FJUM-01-12**
12.4	22	42	32	32	9	4.1	4.5	7.5	**FJUM-01-12-LL**
16.0	26	46	36	36	9	4.1	4.5	7.5	**FJUM-01-16**
16.4	26	46	36	36	9	4.1	4.5	7.5	**FJUM-01-16-LL**
20.0	32	54	43	45	11	5.1	5.5	9.0	**FJUM-01-20**
20.5	32	54	43	45	11	5.1	5.5	9.0	**FJUM-01-20-LL**
25.0	40	62	51	58	11	5.1	5.5	9.0	**FJUM-01-25**
25.5	40	62	51	58	11	5.1	5.5	9.0	**FJUM-01-25-LL**
30.0	47	76	62	68	14	6.1	6.6	11.0	**FJUM-01-30**
30.6	47	76	62	68	14	6.1	6.6	11.0	**FJUM-01-30-LL**
40.0	62	98	80	80	18	8.1	9.0	14.0	**FJUM-01-40**
50.0	75	112	94	100	18	8.1	9.0	14.0	**FJUM-01-50**

Available with drylin® liners (optional: J200/A180):


J


E7


X

drylin® R shaft guides

drylin® R flanged linear plain bearings | Product range

Order key

Type	Size
F J U M-01-10-LL	

With flange	iglidur® J	Liner	Metric	Round design	Inner Ø d1

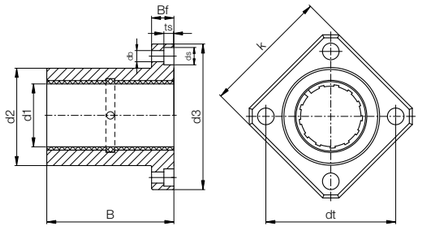
Option:
LL: Floating bearing

Technical data

Part No.	d1 tolerance78)	Fmax. dynamic82) p = 5MPa	Fmax. static82) p = 35MPa	Weight
	[mm]	[N]	[N]	[g]
FJZM-01-08	+0.032 +0.070	960	6,720	20
FJUM-01-10	+0.030 +0.088	725	5,075	32
FJUM-01-10-LL	+0.030 +0.088	725	5,075	32
FJUM-01-12	+0.030 +0.088	960	6,720	42
FJUM-01-12-LL	+0.030 +0.088	960	6,720	42
FJUM-01-16	+0.030 +0.088	1,440	10,080	51
FJUM-01-16-LL	+0.030 +0.088	1,440	10,080	51
FJUM-01-20	+0.030 +0.091	2,250	15,750	88
FJUM-01-20-LL	+0.030 +0.091	2,250	15,750	88
FJUM-01-25	+0.030 +0.091	3,625	25,375	152
FJUM-01-25-LL	+0.030 +0.091	3,625	25,375	152
FJUM-01-30	+0.040 +0.110	5,100	35,700	266
FJUM-01-30-LL	+0.040 +0.110	5,100	35,700	266
FJUM-01-40	+0.040 +0.115	8,000	56,000	552
FJUM-01-50	+0.050 +0.150	12,500	87,500	853

drylin® R flanged linear plain bearings | Product range

Closed, anodised aluminium adapter, square flange



78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1 ±0.01	d2 h7	d3	dt ±0.15	k ±0.15	B	Bf	ts	db	ds	Part No.
8.0	16	32	24	25	25	8	3.1	3.5	6.0	**FJZM-02-08**[82)]
10.0	19	39	29	30	29	9	4.1	4.5	7.5	**FJUM-02-10**
10.4	19	39	29	30	29	9	4.1	4.5	7.5	**FJUM-02-10-LL**
12.0	22	42	32	32	32	9	4.1	4.5	7.5	**FJUM-02-12**
12.4	22	42	32	32	32	9	4.1	4.5	7.5	**FJUM-02-12-LL**
16.0	26	46	36	35	36	9	4.1	4.5	7.5	**FJUM-02-16**
16.4	26	46	36	35	36	9	4.1	4.5	7.5	**FJUM-02-16-LL**
20.0	32	54	43	42	45	11	5.1	5.5	9.0	**FJUM-02-20**
20.5	32	54	43	42	45	11	5.1	5.5	9.0	**FJUM-02-20-LL**
25.0	40	62	51	50	58	11	5.1	5.5	9.0	**FJUM-02-25**
25.5	40	62	51	50	58	11	5.1	5.5	9.0	**FJUM-02-25-LL**
30.0	47	76	62	60	68	14	6.1	6.6	11.0	**FJUM-02-30**
30.6	47	76	62	60	68	14	6.1	6.6	11.0	**FJUM-02-30-LL**
40.0	62	98	80	75	80	18	8.1	9.0	14.0	**FJUM-02-40**
50.0	75	112	94	88	100	18	8.1	9.0	14.0	**FJUM-02-50**

Available with drylin® liners (optional: J200/A180):


J


E7


X

drylin® R shaft guides

drylin® R flanged linear plain bearings | Product range

Order key

Type	Size

F J U M-02-10-LL

With flange	igliduR® J	Liner	Metric	Square design	Inner Ø d1

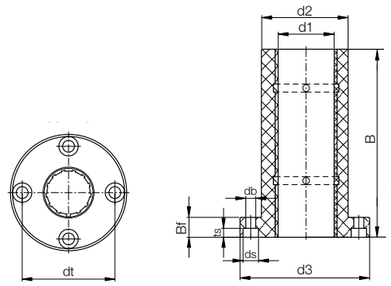
Option:
LL: Floating bearing

Technical data

Part No.	d1 tolerance[78)] [mm]	Fmax. static or dynamic[82)] [N]	Fmax. static[82)] with load at 180° [N]	Weight [g]
FJZM-02-08[82)]	+0.032 +0.070	960	6,720	17
FJUM-02-10	+0.030 +0.088	725	5,075	25
FJUM-02-10-LL	+0.030 +0.088	725	5,075	25
FJUM-02-12	+0.030 +0.088	960	6,720	32
FJUM-02-12-LL	+0.030 +0.088	960	6,720	32
FJUM-02-16	+0.030 +0.088	1,440	10,080	41
FJUM-02-16-LL	+0.030 +0.088	1,440	10,080	41
FJUM-02-20	+0.030 +0.091	2,250	15,750	73
FJUM-02-20-LL	+0.030 +0.091	2,250	15,750	73
FJUM-02-25	+0.030 +0.091	3,625	25,375	135
FJUM-02-25-LL	+0.030 +0.091	3,625	25,375	135
FJUM-02-30	+0.040 +0.110	5,100	35,700	228
FJUM-02-30-LL	+0.040 +0.110	5,100	35,700	228
FJUM-02-40	+0.040 +0.115	8,000	56,000	454
FJUM-02-50	+0.050 +0.150	12,500	87,500	735

drylin® R flanged linear plain bearings | Product range

Closed, anodised aluminium adapter, round flange, tandem design



- Equipped with two liners to increase the guide length

78) According to igus® testing method ▶ Page 1146
85) Fitted with two pieces of JSM-0810-16
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	d2 h7	d3	dt	B	Bf	ts	db	ds	Part No.
8.0	16	32	24	45	8	3.1	3.5	6.0	**FJZMT-01-08**[85]
10.0	19	39	29	52	9	4.1	4.5	7.5	**FJUMT-01-10**
10.4	19	39	29	52	9	4.1	4.5	7.5	**FJUMT-01-10-LL**
12.0	22	42	32	57	9	4.1	4.5	7.5	**FJUMT-01-12**
12.4	22	42	32	57	9	4.1	4.5	7.5	**FJUMT-01-12-LL**
16.0	26	46	36	70	9	4.1	4.5	7.5	**FJUMT-01-16**
16.4	26	46	36	70	9	4.1	4.5	7.5	**FJUMT-01-16-LL**
20.0	32	54	43	80	11	5.1	5.5	9.0	**FJUMT-01-20**
20.5	32	54	43	80	11	5.1	5.5	9.0	**FJUMT-01-20-LL**
25.0	40	62	51	112	11	5.1	5.5	9.0	**FJUMT-01-25**
25.5	40	62	51	112	11	5.1	5.5	9.0	**FJUMT-01-25-LL**
30.0	47	76	62	123	14	6.1	6.6	11.0	**FJUMT-01-30**
30.6	47	76	62	123	14	6.1	6.6	11.0	**FJUMT-01-30-LL**
40.0	62	98	80	151	18	8.1	9.0	14.0	**FJUMT-01-40**
50.0	75	112	94	192	18	8.1	9.0	14.0	**FJUMT-01-50**

Available with drylin® liners (optional: J200/A180):


J


E7


X

drylin® R shaft guides

drylin® R flanged linear plain bearings | Product range

Order key

Type	Size

F J U M T-01-10-LL

- With flange
- igliduR® J
- Liner
- Metric
- Tandem
- Round design
- Inner Ø d1

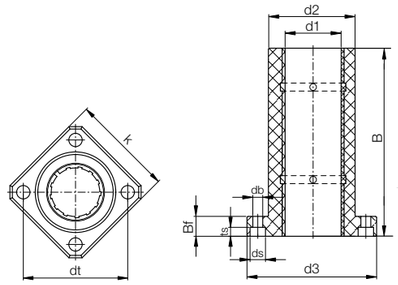
Option:
LL: Floating bearing

Technical data

Part No.	Dimension nominal diameter [mm]	d1 tolerance[78] [mm]	Guide length [mm]	Projected bearing surface [N]	Weight [g]
FJZMT-01-08[85]	8	+0.032 +0.070	45	256	27.13
FJUMT-01-10	10	+0.030 +0.088	52	250	43.75
FJUMT-01-10-LL	10	+0.030 +0.088	52	250	43.75
FJUMT-01-12	12	+0.030 +0.088	57	324	57.00
FJUMT-01-12-LL	12	+0.030 +0.088	57	324	57.00
FJUMT-01-16	16	+0.030 +0.088	70	464	78.28
FJUMT-01-16-LL	16	+0.030 +0.088	70	464	78.28
FJUMT-01-20	20	+0.030 +0.091	80	580	126.42
FJUMT-01-20-LL	20	+0.030 +0.091	80	580	126.42
FJUMT-01-25	25	+0.030 +0.091	112	975	248.85
FJUMT-01-25-LL	25	+0.030 +0.091	112	975	248.85
FJUMT-01-30	30	+0.040 +0.110	123	1,470	388.37
FJUMT-01-30-LL	30	+0.040 +0.110	123	1,470	388.37
FJUMT-01-40	40	+0.040 +0.115	151	2,360	835.00
FJUMT-01-50	50	+0.050 +0.150	192	3,450	1,352.30

drylin® R flanged linear plain bearings | Product range

Closed, anodised aluminium adapter, square flange, tandem design



- Equipped with two liners to increase the guide length

78) According to igus® testing method ▶ Page 1146
85) Fitted with two pieces of JSM-0810-16
Please note: Installation instructions ▶ Page 1079

Dimensions [mm]

d1	d2 h7	d3	dt	k	B	Bf	ts	db	ds	Part No.
8.0	16	32	24	25	45	8	3.1	3.5	6.0	**FJZMT-02-08**[85]
10.0	19	39	29	30	52	9	4.1	4.5	7.5	**FJUMT-02-10**
10.4	19	39	29	30	52	9	4.1	4.5	7.5	**FJUMT-02-10-LL**
12.0	22	42	32	32	57	9	4.1	4.5	7.5	**FJUMT-02-12**
12.4	22	42	32	32	57	9	4.1	4.5	7.5	**FJUMT-02-12-LL**
16.0	26	46	36	35	70	9	4.1	4.5	7.5	**FJUMT-02-16**
16.4	26	46	36	35	70	9	4.1	4.5	7.5	**FJUMT-02-16-LL**
20.0	32	54	43	42	80	11	5.1	5.5	9.0	**FJUMT-02-20**
20.5	32	54	43	42	80	11	5.1	5.5	9.0	**FJUMT-02-20-LL**
25.0	40	62	51	50	112	11	5.1	5.5	9.0	**FJUMT-02-25**
25.5	40	62	51	50	112	11	5.1	5.5	9.0	**FJUMT-02-25-LL**
30.0	47	76	62	60	123	14	6.1	6.6	11.0	**FJUMT-02-30**
30.6	47	76	62	60	123	14	6.1	6.6	11.0	**FJUMT-02-30-LL**
40.0	62	98	80	75	151	18	8.1	9.0	14.0	**FJUMT-02-40**
50.0	75	112	94	88	192	18	8.1	9.0	14.0	**FJUMT-02-50**

Available with drylin® liners (optional: J200/A180):


J


E7


X

drylin® R shaft guides

drylin® R flanged linear plain bearings | Product range

Order key

Type	Size

F J U M T-02-10-LL

With flange	igliduR® J	Liner	Metric	Tandem	Square design	Inner Ø d1

Option:
LL: Floating bearing

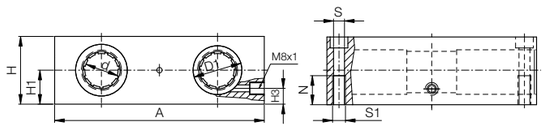
Technical data

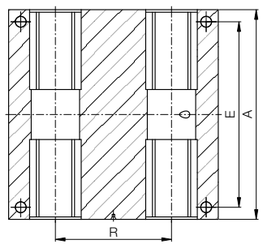
Part No.	Dimension nominal diameter [mm]	d1 tolerance[78] [mm]	Guide length [mm]	Projected bearing surface [N]	Weight [g]
FJZMT-02-08[85]	8	+0.032 +0.070	45	256	23.00
FJUMT-02-10	10	+0.030 +0.088	52	250	36.58
FJUMT-02-10-LL	10	+0.030 +0.088	52	250	36.58
FJUMT-02-12	12	+0.030 +0.088	57	324	48.19
FJUMT-02-12-LL	12	+0.030 +0.088	57	324	48.19
FJUMT-02-16	16	+0.030 +0.088	70	464	67.79
FJUMT-02-16-LL	16	+0.030 +0.088	70	464	67.79
FJUMT-02-20	20	+0.030 +0.091	80	580	110.06
FJUMT-02-20-LL	20	+0.030 +0.091	80	580	110.06
FJUMT-02-25	25	+0.030 +0.091	112	975	230.06
FJUMT-02-25-LL	25	+0.030 +0.091	112	975	230.06
FJUMT-02-30	30	+0.040 +0.110	123	1,470	350.74
FJUMT-02-30-LL	30	+0.040 +0.110	123	1,470	350.74
FJUMT-02-40	40	+0.040 +0.115	151	2,360	739.30
FJUMT-02-50	50	+0.050 +0.150	192	3,450	1,249.30

drylin® R quad blocks | Product range

Closed design

- Housing: Aluminium, equipped with four drylin® R linear plain bearings





Order key

Type	Option	Size
R Q A -	01 -	10

Quad block with RJUM bearings | Aluminium housing | Standard with RJUM-01 | Inner Ø d1

Options:
01: Standard with RJUM-01
03: with RJUM-03
04: with RJM-01

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D1	A	H	H1	H3	R	N	E	S	S1	Part No. Standard with RJUM-01	Self-aligning with RJUM-03	Solid plastic bearings with RJM-01
8	16	65	23	11.5	8	32	11	55	4.3	M5	**RQA-01-08**	–	**RQA-04-08**
10	19	70	25	12.5	10	34	13	60	4.3	M5	**RQA-01-10**	**RQA-03-10**	**RQA-04-10**
12	22	85	32	16	13	42	13	73	5.3	M6	**RQA-01-12**	**RQA-03-12**	**RQA-04-12**
16	26	100	36	18	15	54	13	88	5.3	M6	**RQA-01-16**	**RQA-03-16**	**RQA-04-16**
20	32	130	46	23	19	72	18	115	6.6	M8	**RQA-01-20**	**RQA-03-20**	**RQA-04-20**
25	40	160	56	28	24	88	22	140	8.4	M10	**RQA-01-25**	**RQA-03-25**	**RQA-04-25**
30	47	180	64	32	27	96	26	158	10.5	M12	**RQA-01-30**	**RQA-03-30**	**RQA-04-30**
40	62	230	80	40	35	122	34	202	13.5	M16	**RQA-01-40**	**RQA-03-40**	**RQA-04-40**

Are equipped with:


RJUM-01


RJUM-03


RJM-01

Available with drylin® liners (optional: J200/A180):


J

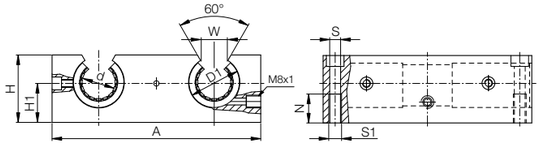

E7

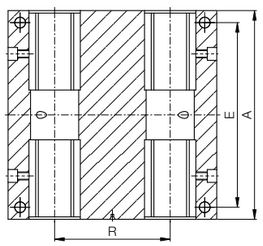

X

drylin® R quad blocks | Product range

Open design

- Housing: Aluminium, equipped with four drylin® R linear plain bearings





Order key

Type	Option	Size
O Q A -	01 -	12

Quad block with OJUM bearings | Aluminium housing | Standard with OJUM-01 | Inner Ø d1

Options:
01: Standard with OJUM-01
03: with OJUM-03

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D1	A	H	H1	W	R	N	E	S	S1	Part No. Standard with OJUM-01	Self-aligning with OJUM-03
12	22	85	30	18	14	42	13	73	5.3	M6	**OQA-01-12**	**OQA-03-12**
16	26	100	35	22	17	54	13	88	5.3	M6	**OQA-01-16**	**OQA-03-16**
20	32	130	42	25	17	72	18	115	6.8	M8	**OQA-01-20**	**OQA-03-20**
25	40	160	51	30	21	88	22	140	9.0	M10	**OQA-01-25**	**OQA-03-25**
30	47	180	60	35	21	96	26	158	10.5	M12	**OQA-01-30**	**OQA-03-30**
40	62	230	77	45	27	122	34	202	13.5	M16	**OQA-01-40**	**OQA-03-40**

Are equipped with:


OJUM-01


OJUM-03

Available with drylin® liners (optional: J200/A180):


J

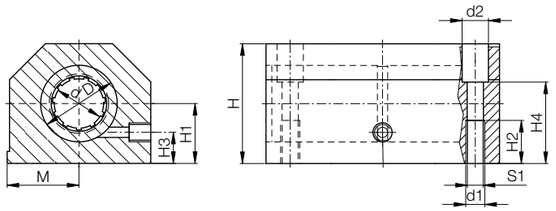

E7

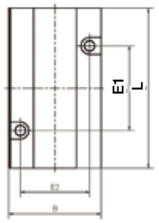

X

drylin® R quad blocks | Product range

Closed, tandem design

● Housing: Aluminium, equipped with two drylin® R linear plain bearings to increase the guide length





Order key

Type	Option	Size
R T A -	01 -	08
Tandem housing with RJUM bearings	Aluminium housing	Standard with RJUM-01	Inner Ø

Options:
01: Standard with RJUM-01
03: with RJUM-03
04: with RJM-01

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D H6	H	H1 +0.01 –0.02	H2	H3	H4	S1	B	L +0.3	M ±0.02	E1 ±0.15	E2 ±0.15	d1	d2	Part No. Standard with RJUM-01	Self-aligning with RJUM-03	Solid plastic bearings with RJM-01
8	16	28	13	13	8	23	M5	35	62	17.5	35	25	4.20	8	**RTA-01-08**	–	**RTA-04-08**
12	22	35	18	13	10	25	M6	43	76	21.5	40	30	5.20	10	**RTA-01-12**	**RTA-03-12**	**RTA-04-12**
16	26	42	22	13	12	30	M6	53	84	26.5	45	36	5.20	10	**RTA-01-16**	**RTA-03-16**	**RTA-04-16**
20	32	50	25	18	13	34	M8	60	104	30.0	55	45	6.80	11	**RTA-01-20**	**RTA-03-20**	**RTA-04-20**
25	40	60	30	22	15	40	M10	78	130	39.0	70	54	8.60	15	**RTA-01-25**	**RTA-03-25**	**RTA-04-25**
30	47	70	35	26	16	48	M12	87	152	43.5	85	62	10.30	18	**RTA-01-30**	**RTA-03-30**	**RTA-04-30**
40	62	90	45	34	20	60	M16	108	176	54.0	100	80	14.25	20	**RTA-01-40**	**RTA-03-40**	**RTA-04-40**

Are equipped with:


RJUM-01


RJUM-03


RJM-01

Available with drylin® liners (optional: J200/A180):


J

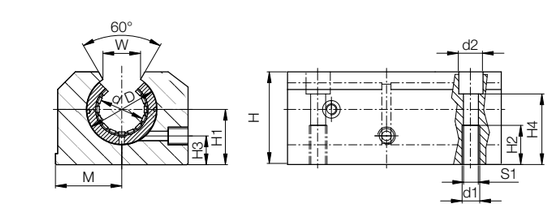

E7

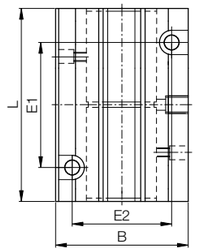

X

drylin® R quad blocks | Product range

Open, tandem design

● Housing: Aluminium, equipped with two drylin® R linear plain bearings to increase the guide length





Order key

Type	Option	Size
O T A -	01 -	12
Tandem housing with OJUM bearings	Aluminium housing	Standard with OJUM-01	Inner Ø

Options:
01: Standard with OJUM-01
03: with OJUM-03

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D H6	H	H1 +0.01 –0.02	H2	H3	H4	S1	B	L +0.3	M ±0.02	E1 ±0.15	E2 ±0.15	d1	d2	W	Part No. Standard with OJUM-01	Self-aligning with OJUM-03
12	22	30	18	13	10	25	M6	43	76	21.5	40	30	5.20	10	14	**OTA-01-12**	**OTA-03-12**
16	26	35	22	13	12	30	M6	53	84	26.5	45	36	5.20	10	17	**OTA-01-16**	**OTA-03-16**
20	32	42	25	18	13	34	M8	60	104	30.0	55	45	6.80	11	17	**OTA-01-20**	**OTA-03-20**
25	40	51	30	22	15	40	M10	78	130	39.0	70	54	8.60	15	21	**OTA-01-25**	**OTA-03-25**
30	47	60	35	26	16	48	M12	87	152	43.5	85	62	10.30	18	21	**OTA-01-30**	**OTA-03-30**
40	62	77	45	34	20	60	M16	108	176	54.0	100	80	14.25	20	27	**OTA-01-40**	**OTA-03-40**

Are equipped with:


OJUM-01


OJUM-03

Available with drylin® liners (optional: J200/A180):


J

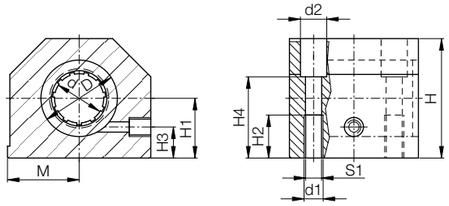

E7

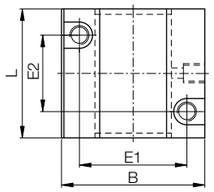

X

drylin® R quad blocks | Product range

Closed, long design

● Housing: Aluminium, equipped with drylin® R linear plain bearings





Order key

Type	Option	Size
R G A	- 01	- 12
Linear housing with RJUM bearing	Aluminium housing	Standard with RJUM-01	Inner Ø

Options:
01: Standard with RJUM-01
03: with RJUM-03
04: with RJM-01

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D H6	H	H1 +0.01 –0.02	H2	H3	H4	S1	B	L ±0.3	M ±0.02	E1 ±0.15	E2 ±0.15	d1	d2	Part No. Standard with RJUM-01	Self-aligning with RJUM-03	Solid plastic bearings with RJM-01
8	16	28	13	10	8	14	M4	35	32	17.5	25	20	3.2	6	**RGA-01-08**	**–**	**RGA-04-08**
12	22	35	18	11	10	25	M5	43	39	21.5	32	23	4.2	6	**RGA-01-12**	**RGA-03-12**	**RGA-04-12**
16	26	42	22	13	12	30	M6	53	43	26.5	40	26	5.2	10	**RGA-01-16**	**RGA-03-16**	**RGA-04-16**
20	32	50	25	18	13	34	M8	60	54	30.0	45	32	6.8	11	**RGA-01-20**	**RGA-03-20**	**RGA-04-20**
25	40	60	30	22	15	40	M10	78	67	39.0	60	40	8.6	15	**RGA-01-25**	**RGA-03-25**	**RGA-04-25**
30	47	70	35	22	16	48	M10	87	79	43.5	68	45	8.6	15	**RGA-01-30**	**RGA-03-30**	**RGA-04-30**
40	62	90	45	26	20	60	M12	108	91	54.0	86	58	10.3	18	**RGA-01-40**	**RGA-03-40**	**RGA-04-40**

Are equipped with:


RJUM-01


RJUM-03


RJM-01

Available with drylin® liners (optional: J200/A180):


J

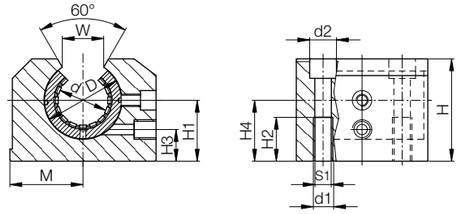

E7

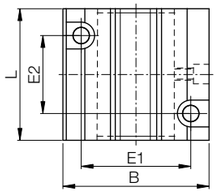

X

drylin® R quad blocks | Product range

Open, long design

● Housing: Aluminium, equipped with drylin® R linear plain bearings





Order key

Type	Option	Size
O G A	- 01	- 12
Linear housing with OJUM bearing	Aluminium housing	Standard with OJUM-01	Inner Ø

Options:
01: Standard with OJUM-01
03: with OJUM-03

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D H6	H	H1 +0.01 –0.02	H2	H3	H4	S1	B	L ±0.3	M ±0.02	E1 ±0.15	E2 ±0.15	d1	d2	W +0.6	Part No. Standard with OJUM-01	Self-aligning with OJUM-03
12	22	28	18	11	8	25	M5	43	39	21.5	32	23	4.2	8	14	**OGA-01-12**	**OGA-03-12**
16	26	35	22	13	12	30	M6	53	43	26.5	40	26	5.2	10	17	**OGA-01-16**	**OGA-03-16**
20	32	42	25	18	13	34	M8	60	54	30.0	45	32	6.8	11	17	**OGA-01-20**	**OGA-03-20**
25	40	51	30	22	15	40	M10	78	67	39.0	60	40	8.6	15	21	**OGA-01-25**	**OGA-03-25**
30	47	60	35	22	16	48	M10	87	79	43.5	68	45	8.6	15	21	**OGA-01-30**	**OGA-03-30**
40	62	77	45	26	20	60	M12	108	91	54.0	86	58	10.3	18	27	**OGA-01-40**	**OGA-03-40**

Are equipped with:


OJUM-01


OJUM-03

Available with drylin® liners (optional: J200/A180):


J

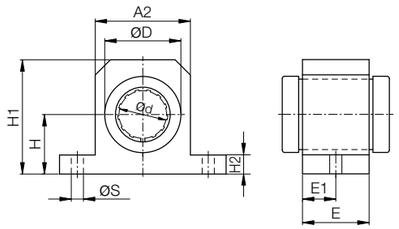

E7

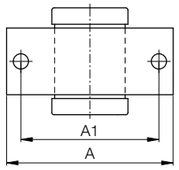

X

drylin® R pillow blocks | Product range

Closed, short design

- Housing: Aluminium, equipped with drylin® R linear plain bearings
- Variations:
  Standard: RGAS-01-Ø
  Self-aligning: RGAS-03-Ø
  Solid plastic bearing (cost-effective, lightweight): RGAS-04-Ø





Order key

Type	Option	Size
RGAS	01	12

Linear housing with RJUM bearing | Aluminium housing | Small | Standard with RJUM-01 | Inner Ø

Options:
01: Standard with RJUM-01
03: with RJUM-03
04: with RJM-01

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D	H	H1	H2	A	A1	A2	E	E1	S	Part No. Standard with RJUM-01	Self-aligning with RJUM-03	Solid plastic bearings with RJM-01
12	22	18	35.0	6	52	42	30	20	10	5.3	**RGAS-01-12**	**RGAS-03-12**	**RGAS-04-12**
16	26	22	40.5	7	56	46	34	22	11	5.3	**RGAS-01-16**	**RGAS-03-16**	**RGAS-04-16**
20	32	25	48.0	8	70	58	40	28	14	6.4	**RGAS-01-20**	**RGAS-03-20**	**RGAS-04-20**
25	40	30	58.0	10	80	68	50	40	20	6.4	**RGAS-01-25**	**RGAS-03-25**	**RGAS-04-25**
30	47	35	67.0	10	88	76	58	48	24	6.4	**RGAS-01-30**	**RGAS-03-30**	**RGAS-04-30**
40	62	45	85.0	12	108	94	74	56	28	8.4	**RGAS-01-40**	**RGAS-03-40**	**RGAS-04-40**

Are equipped with:


RJUM-01


RJUM-03


RJM-01

Available with drylin® liners (optional: J200/A180):


J

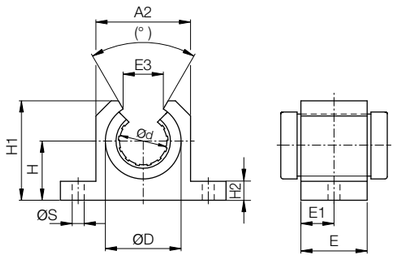

E7

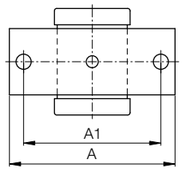

X

drylin® R pillow blocks | Product range

Open, short design

- Housing: Aluminium, equipped with drylin® R linear plain bearings
- Variations:
  Standard: OGAS-01-Ø
  Self-aligning: OGAS-03-Ø





Order key

Type	Option	Size
OGAS	01	12

Linear housing with OJUM bearing | Aluminium housing | Small | Standard with OJUM-01 | Inner Ø

Options:
01: Standard with OJUM-01
03: with OJUM-03

Please note:
Installation instructions
▶ Page 1079

Dimensions [mm]

d	D	H	H1	H2	A	A1	A2	E	E1	E3	(°)	S	Part No. Standard with OJUM-01	Self-aligning with OJUM-03
12	22	18	28	6	52	42	30	20	10	14	78	5.3	**OGAS-01-12**	**OGAS-03-12**
16	26	22	33.5	7	56	46	34	22	11	17	78	5.3	**OGAS-01-16**	**OGAS-03-16**
20	32	25	42	8	70	58	40	28	14	17	60	6.4	**OGAS-01-20**	**OGAS-03-20**
25	40	30	51	10	80	68	50	40	20	21	60	6.4	**OGAS-01-25**	**OGAS-03-25**
30	47	35	60	10	88	76	58	48	24	21	54	6.4	**OGAS-01-30**	**OGAS-03-30**
40	62	45	77	12	108	94	74	56	28	27	54	8.4	**OGAS-01-40**	**OGAS-03-40**

Are equipped with:


OJUM-01


OJUM-03

Available with drylin® liners (optional: J200/A180):


J


E7


X

igus® testing method for measuring the tolerance of drylin® linear plain bearings

To ensure the correct function of a drylin® linear plain bearing, it is necessary to use the bearing with a defined minimum oversize (bearing clearance). The quality control of this part is carried out with a plug gauge test. For this purpose, specific force is defined with which the plug gauge is loaded when the plain bearing is tested.

Part No.	Test force [N]	Øi test housing	Min. bearing Øi (plug gauge falls)	Max. bearing Øi (plug gauge sticks)
J / J200 / E7 / A180 / A160UM-01/02-10	0.981	12.000mm	10.030mm	10.070mm
J / J200 / E7 / A180 / A160UM-01/02-12	1.373	14.000mm	12.030mm	12.070mm
J / J200 / E7 / A180 / A160UM-01/02-16	1.864	18.000mm	16.030mm	16.070mm
J / J200 / E7 / A180 / A160UM-01/02-20	2.649	23.000mm	20.030mm	20.070mm
J / J200 / E7 / A180 / A160UM-01/02-25	3.729	28.000mm	25.030mm	25.070mm
J / J200 / E7 / A180 / A160UM-01/02-30	4.807	34.000mm	30.040mm	30.090mm
J / J200 / E7 / A180 / A160UM-01/02-40	7.063	44.000mm	40.040mm	40.090mm
J / J200 / E7 / A180 / A160UM-01/02-50	9.810	55.000mm	50.050mm	50.150mm
J / J200 / E7UM-01/02-60	13.047	65.000mm	60.050mm	60.150mm
JUI-01-06	0.981	0.4684in	0.3768in	0.3776in
JUI-01-08	1.373	0.5934in	0.5016in	0.5024in
JUI-01-10	1.864	0.7184in	0.6268in	0.6276in
JUI-01-12	2.649	0.8747in	0.7516in	0.7524in
JUI-01-16	3.729	1.1247in	1.0016in	1.0024in
JUI-01-20	4.807	1.4058in	1.2520in	1.2531in
JUI-01-24	7.063	1.6558in	1.5020in	1.5031in
JUI-01-32	9.810	2.1870in	2.0024in	2.0039in
RJM / RJMP / RJ4JP-01-08	–	16.000mm	8.025mm	8.061mm
RJM / RJMP / RJ4JP-01-10	–	19.000mm	10.025mm	10.061mm
RJM / RJMP / RJ4JP-01-12	–	22.000mm	12.032mm	12.075mm
RJM / RJMP / RJ4JP-01-16	–	26.000mm	16.032mm	16.075mm
RJM / RJMP / RJ4JP-01-20	–	32.000mm	20.040mm	20.092mm
RJM / RJMP / RJ4JP-01-25	–	40.000mm	25.040mm	25.092mm
RJM / RJMP / RJ4JP-01-30	–	47.000mm	30.040mm	30.092mm
RJM / RJMP-01-40	–	62.000mm	40.050mm	40.112mm
RJI-01-06	0.981	0.6250in	0.3762in	0.3776in
RJI-01-08	1.373	0.8750in	0.5013in	0.5030in
RJI-01-10	1.864	1.1250in	0.6265in	0.6282in
RJI-01-12	2.649	1.2500in	0.7516in	0.7536in
RJI-01-16	3.729	1.5625in	1.0035in	1.0056in
RJI-01-20	4.807	2.0000in	1.2520in	1.2544in
RJI-01-24	7.063	2.3750in	1.5020in	1.5044in
RJI-01-32	9.810	3.0000in	2.0024in	2.0053in
RJ260(U)M-02-12	–	19.000mm	12.032mm	12.084mm
RJ260(U)M-02-16	–	24.000mm	16.032mm	16.084mm
RJ260(U)M-02-20	–	28.000mm	20.040mm	20.100mm
RJ260(U)M-02-25	–	35.000mm	25.040mm	25.100mm

Part No.	Test force [N]	Øi test housing	Min. bearing Øi (plug gauge falls)	Max. bearing Øi (plug gauge sticks)
XUMO-01-10	0.981	12.000mm	9.98mm	10.02mm
XUM-01/02-12	1.373	14.000mm	12.02mm	12.06mm
XUM-01-14	1.500	16.000mm	14.02mm	14.06mm
XUM-01/02-16	1.864	18.000mm	16.02mm	16.06mm
XUM-01/02-20	2.649	23.000mm	20.03mm	20.07mm
XUM-01/02-25	3.729	28.000mm	24.97mm	25.01mm
XUM-01/02-30	4.807	34.000mm	29.96mm	30.01mm
XUM-01/02-40	7.063	44.000mm	40.00mm	40.05mm

Explanation:
The iglidur® X material has a higher stiffness than iglidur® J. This causes shifts – depending on the diameter – compared to the ratio of test force to LD diameter. The parts are designed in such a way that under load the clearance between the iglidur® X and iglidur® J plain bearings is as identical as possible. Thereby in the use of iglidur® X liners, increased shifting forces can occur in the unloaded new condition on an h-toleranced shaft.

When using a plain bearing (e.g. JUM/RJM) in connection with an adapter/ housing (e.g. RJUM, OJUM, RGA) the factory tolerance of the housing hole (standard case: H7) is also added to the minimum clearance stated above. The total from these two values then produces the maximum possible bearing tolerance.

The effective bearing clearance is also influenced by the shaft tolerance. The maximum shaft undersize value should be added to give the maximum possible clearance.

F_{max} dynamic:
The maximum values are the result of the projected surface and 5MPa surface pressure.

F_{max} static:
The maximum values are the result of the projected surface and 35MPa surface pressure.

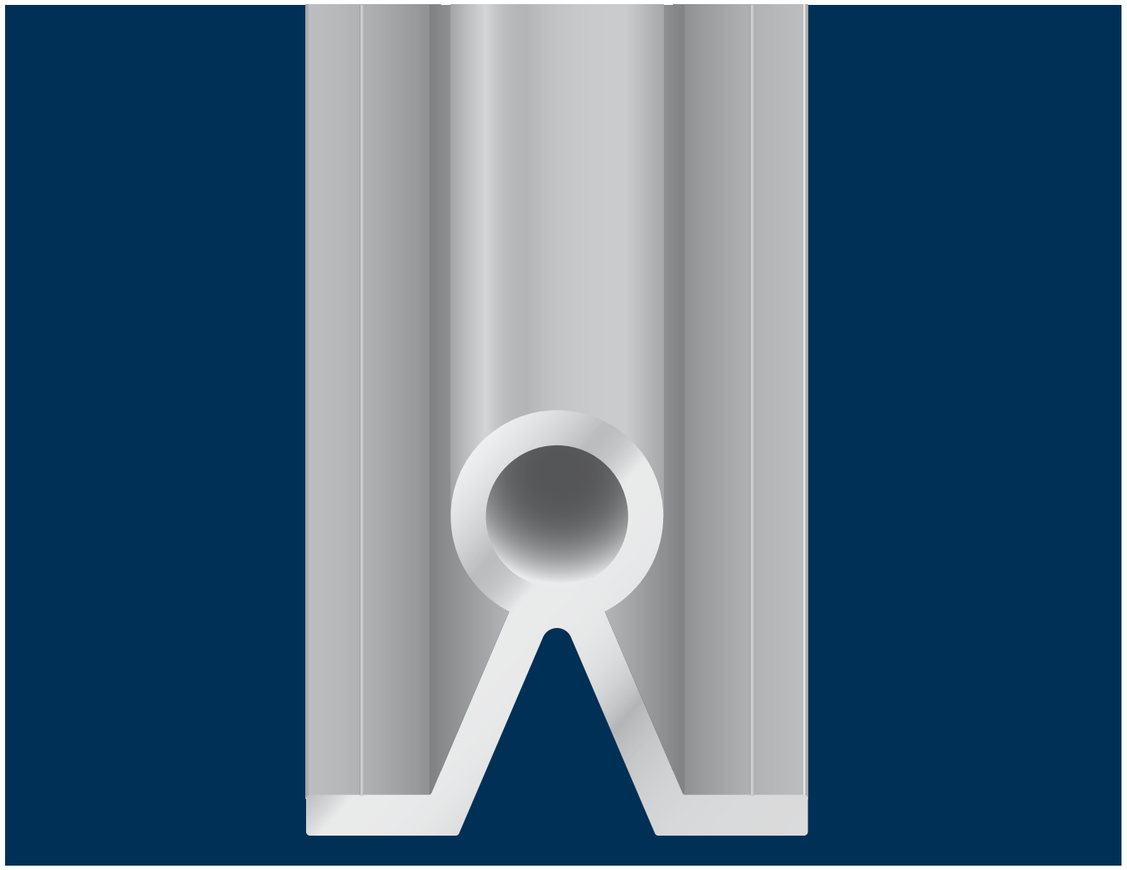
Installation instructions ▶ Page 1079

Tightening torque for drylin® connections between metal parts

Metric thread (Da)	Tightening torque [Nm]	Recommended tightening torque [Nm]
M3	0.5–1.1	0.7
M4	1.0–2.8	1.5
M5	2.0–5.5	3.0
M6	4.0–10.0	6.0
M8	8.0–23.0	15.0
M10	22.0–46.0	30.0

Please be aware of the minimal screw-in depth for aluminium and zinc die-casting parts: 1.5 x Da

My sketches



drylin® linear technology – drylin® shafts

Hard-anodised aluminium shafts for optimum running performance

Stainless steel for high corrosion resistance

Hardened steel and stainless steel shafts

Carbon fibre shafts

Round shafts with or without support

drylin® shafts | Advantages

Suitable liner materials:

	The all-rounder – iglidur® J	The specialist – iglidur® J200	The extreme – iglidur® X	The endurance runner – iglidur® E7	The FDA-compliant – iglidur® A180	Blue Sky Thinking FDA/EU-compliant iglidur® A160
Potential counter partner	All shaft materials	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	All shaft materials	Stainless steel
Application temperature	from –50°C to +90°C	from –50°C to +90°C	from –100°C to +250°C	from –50°C to +70°C	from –50°C to +90°C	from –50°C to +90°C
Best coefficient of friction with	Steel shaft	Hard-anodised aluminium	Hard-chromed steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Maximum service life with	Hard-anodised aluminium	Hard-anodised aluminium	Hardened stainless steel	Steel/stainless steel shaft	Stainless steel shaft	Hardened stainless steel shafts
Permissible stat. surface pressure	35MPa	23MPa	150MPa	18MPa	28MPa	15MPa
Moisture absorption	1.3% weight	0.7% weight	0.5% weight	< 0.1% weight	0.2% weight	< 0.1% weight
Volume resistance	> 10^{13}Ωcm	> 10^{8}Ωcm	< 10^{6}Ωcm	> 10^{8}Ωcm	> 10^{12}Ωcm	> 10^{12}Ωcm
More information	► Page 159	► Page 261	► Page 279	► Page 267	► Page 401	► Page 419

Available shaft materials:

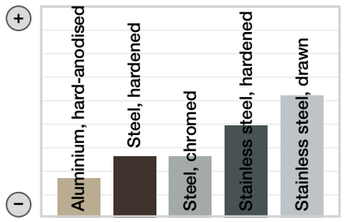
Aluminium
- Ideal in combination with liners made from iglidur® J/J200
- Lightweight
- Low wear
- Corrosion-free
- Available from stock

Steel
- E7 liners for up to 8 times longer service life
- Cost-effective standard
- High load capacity
- Dry area applications
- Hard chrome-plated also available
- Lower coefficient of friction against plastic bearings

Stainless steel
- A180 liners for food and pharmaceutical applications
- Corrosion resistance
- High chemical resistance
- Ideal solution for wet applications
- 316 stainless steel for extremely chemical intensive applications

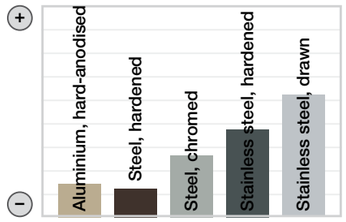
Please remember that this is a technical surface. Small colour variations are possible due to variable coating depths.

Wear



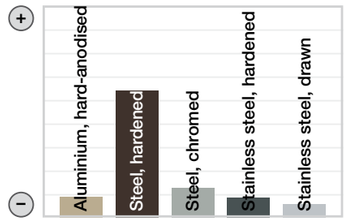
iglidur® J against particular shaft materials

Coefficient of friction



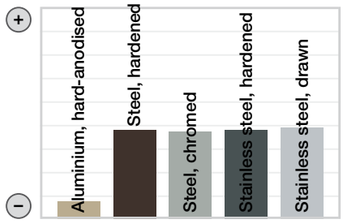
iglidur® J against particular shaft materials

Corrosion



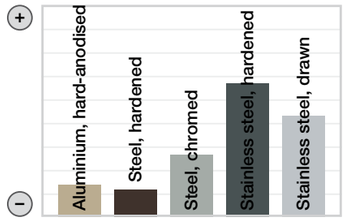
iglidur® J against particular shaft materials

Weight



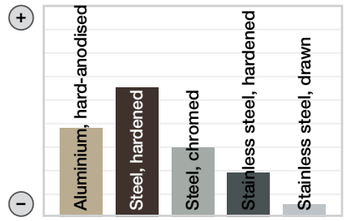
iglidur® J against particular shaft materials

Cost



iglidur® J against particular shaft materials

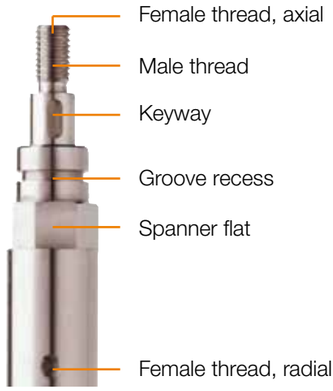
Chemical charge



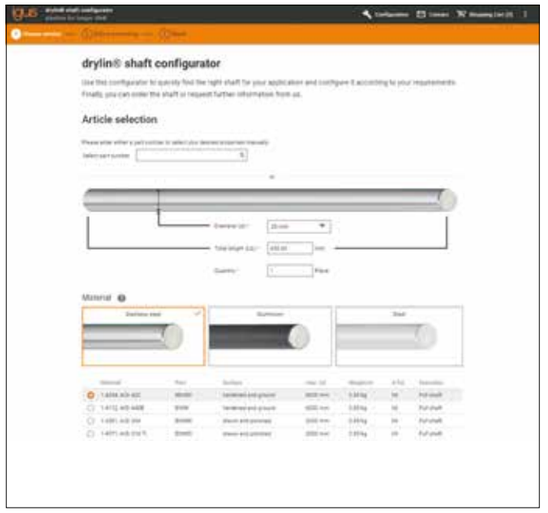
iglidur® J against particular shaft materials

drylin® shafts | Product range New

Inquiries can be put online as well:
► **www.igus.eu/shaftinquiry**



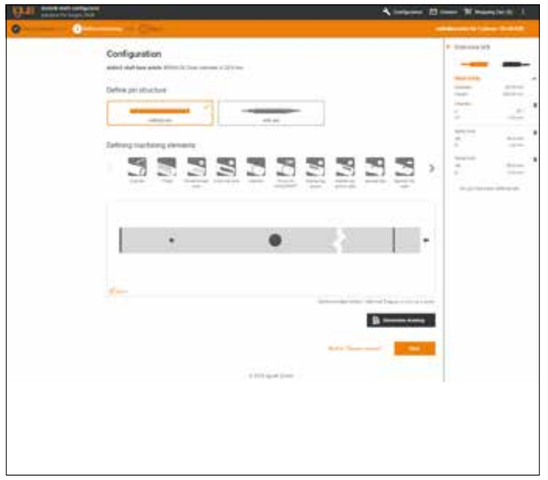
Special machining
All shafts can be individually machined. Please send us your drawing. We can then provide a quotation quickly.

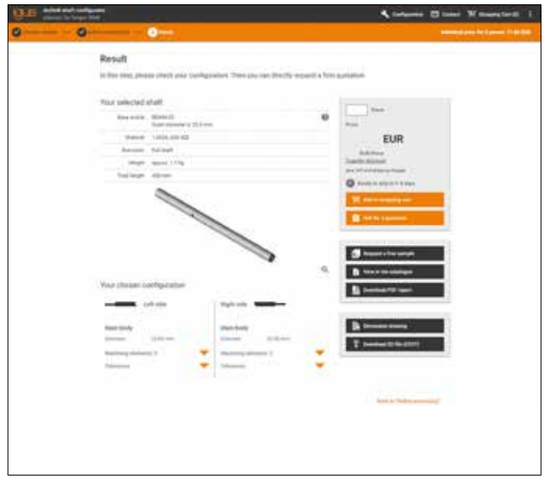


Configurator for guide shafts: guide shafts with machining – anyone can configure online

With this online tool, guide shafts with and without machining can be individually configured and ordered. Fast and easy with no previous CAD experience. All in all, the tool makes it possible to order 7 shaft materials from Ø 6 to 50mm. Order online, delivered quickly.
- Add chamfers with just one click
- Offset machined end possible
- Radial and axial holes, with or without female thread
- With plausibility check
- Live price display

► **www.igus.eu/shaft-configurator**





drylin® shafts | Product range

Material	Aluminium			Steel			
	●	⚲	○	●	⚲	●	⚲
Designation							
	AWMP AWMPV	AWMU	AWMR	SWM	SWUM SWUMN	SWMH	SWUMH SWUMHN
Material							
	EN AW 6061/6060			AISI 1055		1.1213 HV	
Availability							
Ø 6	●			▲		▲	
Ø 8	●			▲		▲	
Ø 10	●	●		▲		▲	
Ø 12	●	●	●	▲	▲	▲	▲
Ø 16	●	●	●	▲	▲	▲	▲
Ø 20	●	●	●	▲	▲	▲	▲
Ø 25	●	●	●	▲	▲	▲	▲
Ø 30	●[164)] / ●	●		▲	▲	▲	▲
Ø 40	●[164)] / ●	●		▲	▲	▲	▲
Ø 50	●[164)]			▲	▲	▲	▲
Ø 60	●[164)]						
Ø Tolerance							
	h8	–0.1mm	h9	h6	h6	h7	h7
Max. supply length Ø 8–10mm							
	3,000	–	–	3,000	–	–	3,000
Max. supply length Ø 12–50mm							
	3,000	4,000	3,000	6,000	6,000	6,000	6,000
Surface							
	hard-anodised			hardened/ground		hard chromed	
Surface roughness Ra							
	< 0.6			0.15–0.3			
Hardness							
	up to 550 HV			60+4 HRC			
Roundness							
	≤ 1/2 Ø Tolerance			≤ 1/2 Ø Tolerance			

	Stainless steel, hardened				Drawn stainless steel			Carbon fibre
	●	⚲	●	⚲	●	● ⚲	● ⚲	○
	EWM	EWUM EWUMN	EEWM	EEWUM EEWUMN	EWMR	EWMS	EWUMS	CWM
	AISI 440B		AISI 420		AISI 304	AISI 316Ti		CFK Composite
	▲		▲		▲	▲		
	▲		▲		▲	▲		
	▲		▲		▲	▲		
	▲	▲	▲	▲	▲	▲	▲	▲
	▲	▲	▲	▲	▲	▲	▲	▲
	▲	▲	▲	▲	▲	▲	▲	▲
	▲	▲	▲	▲	▲	▲	▲	
	▲	▲	▲	▲	▲	▲	▲	▲
	▲	▲	▲		▲	▲	▲	
	▲	▲	▲	▲	▲			
	h6	h6	h6	h6	h9	h9	h9	–0.1mm
	–	–	3,000	–	–	–	–	2,000
	6,000	6,000	6,000	6,000	3,000	3,000	3,000	2,000
	hardened/ground				drawn, polished			UCU unidirectional/ cross winding/ unidirectional
	0.15–0.3				0.3–0.6			< 0.6µm
	52+8 HRC				soft			–
	≤ 1/2 Ø Tolerance				≤ 1/2 Ø Tolerance			± 0.05mm

Delivery time: ● **From stock** ▲ **simply cut shafts 3–8 days; machined shafts 12 days**

[164)] **Hollow profile 30 · 7.5; 40 · 10; 50 · 11**

drylin® shafts | Product range

Precision aluminium shafts

AWMR AWMP

Order key

Type	Size	Options
AW M P -	06	-2000

Aluminium shaft | Metric | Precise | Outer Ø | Shaft length [mm]

AWMP:
Solid shaft up to Ø 25mm
Hollow shaft from Ø 30mm
AWMR:
Tube

igus® recommendation: Linear plain bearings equipped with iglidur® J200 liners for the longest service life

- Material: EN AW 6061/6060
- Straightness: EN 754-3
- Hardness: 75 HB
- Surface: hard-anodised
- Hardness: up to 550 HV
- Imperial shafts available upon request

Hard-anodised surfaces
▶ Page 958
Minimum saw lengths
▶ Page 961

Please contact us!
drylin® shafts can be individually machined.
Please send us your drawing or configure online.
We can then provide a quotation quickly.
▶ www.igus.eu/shaft-configurator

Dimensions [mm]

Part No.	Design	Outer Ø	Tolerance	Insulation thickness	Inner Ø	Max. length	Weight [kg/m]
AWMP-06	Solid shaft	6	h8	–	–	3,000	0.08
AWMP-08	Solid shaft	8	h8	–	–	3,000	0.14
AWMP-10	Solid shaft	10	h8	–	–	3,000	0.22
AWMP-12	Solid shaft	12	h8	–	–	3,000	0.32
AWMR-12	Tube	12	h8	2	8	3,000	0.17
AWMP-16	Solid shaft	16	h8	–	–	3,000	0.56
AWMR-16	Tube	16	h8	2	12	3,000	0.25
AWMP-20	Solid shaft	20	h8	–	–	3,000	0.88
AWMR-20	Tube	20	h9	2	16	3,000	0.32
AWMP-25	Solid shaft	25	h8	–	–	3,000	1.37
AWMR-25	Tube	25	h9	3	19	3,000	0.59
AWMP-30	Hollow shaft	30	h8	7.5	15	3,000	1.48
AWMPV-30	Solid shaft	30	h8	–	–	3,000	1.9
AWMP-40	Hollow shaft	40	h8	10	20	3,000	2.63
AWMPV-40	Solid shaft	40	h8	–	–	3,000	3.4
AWMP-50	Hollow shaft	50	h8	11	28	3,000	3.75
AWMP-60	Hollow shaft	60	h8	11	38	3,000	4.7

Order example:
AWMP-12-500: Precision aluminium shaft, 12mm Ø, 500mm length

drylin® shafts | Product range

Supported aluminium shafts

AWMU

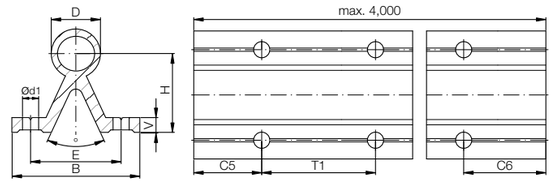
Order key

Type	Size	Options
AW M U -	12	-2000

Aluminium shaft | Metric | Supported | Outer Ø | Shaft length [mm]

- Material: EN AW 6061/6060
- Straightness: DIN 12020
- Hardness: 75 HB
- Surface: hard-anodised
- Hardness: up to 550 HV
- Symmetrical standard hole pattern C5 = C6

Hard-anodised surfaces
▶ Page 958
Minimum saw lengths
▶ Page 961



Dimensions [mm]

Part No.	D –0.1	B	H ±0.25	V	d1	(°)	E ±0.25	T1	C5/C6 Min.	C5/C6 Max.	Max. length	Weight [kg/m]	Iy [mm⁴]	Iz [mm⁴]	Wby [mm²]	Wbz [mm²]
AWMU-12	12	40	22	5	4.5	50	29	75	20	57	4,000	0.75	26,600	19,700	1,330	1,091
AWMU-16	16	45	26	5	5.5	50	33	100	20	69	4,000	1.00	40,000	39,200	1,778	1,844
AWMU-20	20	52	32	6	6.6	50	37	100	20	69	4,000	1.42	76,600	86,200	2,946	3,336
AWMU-25	25	57	36	6	6.6	50	42	120	20	79	4,000	1.81	109,800	146,700	3,853	5,103
AWMU-30	30	69	42	7	9.0	50	51	150	20	94	4,000	2.69	226,900	328,700	6,577	10,049
AWMU-40[86)]	40	73	50	8	9.0	50	55	200	20	119	4,000	4.06	382,100	734,800	10,468	19,160

[86)] **The tolerance for the shaft diameter D amounts –0.15**

Order example:
AWMU-16-500: supported aluminium shaft, 16mm Ø, 500mm length

drylin® shafts | Product range

Standard steel shafts

SWM SWUMN SWUM

- Completely supported and mounted with standard aluminium support
- Available shaft materials:
  - ▶ Cf53 steel (AISI 1055), hardened/ground
  - ▶ Cf53 steel (AISI 1055), hard-chromed
- For supported shafts:
  - ▶ Partial shaft support supplied in lengths of 600mm max.
  - ▶ Standard pitch T2, T1 also possible upon request
  - ▶ Symmetrical hole pitches C5 = C6

Order key

Type	Size	Options
SW M-	06	-2000
Steel shaft	Metric	Outer Ø	Shaft length [mm]

igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Dimensions [mm] – steel shafts 1.1213

Part No.	Outer Ø	Weight [kg/m]	Max. length	Effective hardness depth (at 1.1213)
SWM-06	6	0.222	3,000	0.8
SWM-08	8	0.359	4,000	0.9
SWM-10	10	0.617	4,000	0.9
SWM-12	12	0.888	6,000	1.0
SWM-16	16	1.578	6,000	1.2
SWM-20	20	2.466	6,000	1.6
SWM-25	25	3.853	6,000	1.8
SWM-30	30	5.549	6,000	2.0
SWM-40	40	9.865	6,000	2.2
SWM-50	50	15.413	6,000	2.4

Dimensions [mm] – hard-chromed steel shafts 1.1213

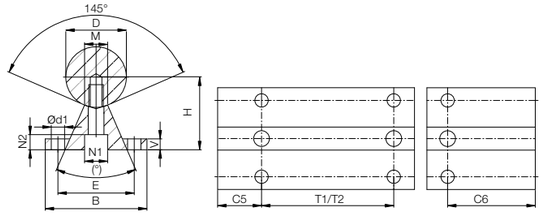
Part No.	Outer Ø	Weight [kg/m]	Max. length	Effective hardness depth (at 1.1213)
SWMH-06	6	0.222	3,000	0.8
SWMH-08	8	0.359	4,000	0.9
SWMH-10	10	0.617	4,000	0.9
SWMH-12	12	0.888	6,000	1.0
SWMH-16	16	1.578	6,000	1.2
SWMH-20	20	2.466	6,000	1.6
SWMH-25	25	3.853	6,000	1.8
SWMH-30	30	5.549	6,000	2.0
SWMH-40	40	9.865	6,000	2.2
SWMH-50	50	15.413	6,000	2.4

Order example:
SWM-16-500: steel shaft 16mm Ø 1.1213, 500mm in length

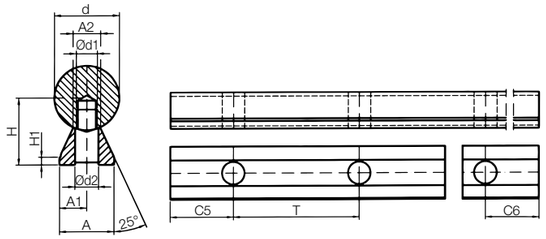
drylin® shafts | Product range

Supported standard steel shaft

SWUM



SWUMN



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Dimensions [mm] – supported steel shafts 1.1213

Part No.	D	B	H ±0.02	V	N1	N2	d1	M	(°)	E	T1 ±0.15	C5/C6 Min. for T1	C5/C6 Max. for T1	T2 Standard	C5/C6 Min. for T2 Standard	C5/C6 Max. for T2 Standard	Weight [kg/m]
SWUM-12	12	40	22	5	8.0	5.0	4.5	5.8	50	29	75	20	57	120	20	79	1.75
SWUM-16	16	45	26	5	9.5	6.0	5.5	7.0	50	33	100	20	69	150	20	94	2.64
SWUM-20	20	52	32	6	11.0	6.5	6.6	8.3	50	37	100	20	69	150	20	94	3.97
SWUM-25	25	57	36	6	14.0	8.5	6.6	10.8	50	42	120	20	79	200	20	119	5.65
SWUM-30	30	69	42	7	17.0	10.5	9.0	11.0	50	51	150	20	94	200	20	119	7.93
SWUM-40	40	73	50	8	17.0	10.5	9.0	15.0	50	55	200	20	119	300	20	169	12.88
SWUM-50	50	84	60	9	19.0	12.5	11.0	19.0	46	63	200	20	119	300	20	169	19.60

Dimensions [mm] – supported steel shafts 1.1213

Part No.	d	H ±0.02	H1	A	A1	A2 ±0.02	d1	d2	T	C5/C6 Min.	C5/C6 Max.	Weight [kg/m]
SWUMN-12	12	14.5	3	11	5.5	5.4	M4	4.5	75	20	57	1.62
SWUMN-16	16	18	3	14	7.0	7.0	M5	5.5	75	20	57	2.54
SWUMN-20	20	22	3	17	8.5	8.1	M6	6.6	75	20	57	3.81
SWUMN-25	25	26	3	21	10.5	10.3	M8	9.0	75	20	57	5.62
SWUMN-30	30	30	3	23	11.5	11.0	M10	11.0	100	20	69.5	7.63
SWUMN-40	40	39	4	30	15.0	15.0	M12	13.5	100	20	69.5	13.47
SWUMN-50	50	46	5	35	17.5	19.0	M14	15.5	100	20	69.5	20.31

Low level supported shafts are delivered unmounted.

Order example:
SWUM-16-500: supported steel shaft 16mm Ø made from 1.1213, 500mm length

drylin® shafts | Product range

Stainless steel shafts

EWM EEWM EWMR

STAIN-LESS STEEL

igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

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Please send us your drawing or configure online.
We can then provide a quotation quickly.
▶ **www.igus.eu/shaft-configurator**

Dimensions [mm] – hardened stainless steel AISI 440B

Part No.	Outer Ø	Weight [kg/m]	Max. length	Effective hardness depth
EWM-06	6	0.222	3,000	0.8
EWM-08	8	0.359	4,000	0.9
EWM-10	10	0.617	4,000	0.9
EWM-12	12	0.888	6,000	1.0
EWM-16	16	1.578	6,000	1.2
EWM-20	20	2.466	6,000	1.6
EWM-25	25	3.853	6,000	1.8
EWM-30	30	5.549	6,000	2.0
EWM-40	40	9.865	6,000	2.2
EWM-50	50	15.413	6,000	2.4

drylin® shafts | Product range

Materials: AISI 440B, AISI 420C, AISI 304, AISI 316Ti

Order key

Type	Size	Options
EW M	- 06	- 2000
Steel shaft	Metric	Outer Ø	Shaft length [mm]

Available shaft materials
AISI 440B, hardened/ground ▶ EWM
AISI 420C, hardened/ground ▶ EEWM
AISI 304, drawn ▶ EWMR
AISI 316Ti, drawn ▶ EWMS

Dimensions [mm] – hardened stainless steel AISI 420C

Part No.	Outer Ø	Weight [kg/m]	Max. length	Effective hardness depth
EEWM-06	6	0.222	3,000	0.8
EEWM-08	8	0.359	4,000	0.9
EEWM-10	10	0.617	4,000	0.9
EEWM-12	12	0.888	6,000	1.0
EEWM-16	16	1.578	6,000	1.2
EEWM-20	20	2.466	6,000	1.6
EEWM-25	25	3.853	6,000	1.8
EEWM-30	30	5.549	6,000	2.0
EEWM-40	40	9.865	6,000	2.2
EEWM-50	50	15.413	6,000	2.4

Dimensions [mm] – stainless steel AISI 304 (EWMR) or AISI 316Ti soft stainless steel (EWMS)

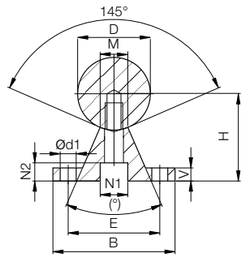
Part No.		Outer Ø	Weight [kg/m]	Max. length
EWMR-06	**EWMS-06**	6	0.222	3,000
EWMR-08	**EWMS-08**	8	0.359	3,000
EWMR-10	**EWMS-10**	10	0.617	3,000
EWMR-12	**EWMS-12**	12	0.888	3,000
EWMR-16	**EWMS-16**	16	1.578	3,000
EWMR-20	**EWMS-20**	20	2.466	3,000
EWMR-25	**EWMS-25**	25	3.853	3,000
EWMR-30	**EWMS-30**	30	5.549	3,000
EWMR-40	**EWMS-40**	30	5.549	3,000
EWMR-50		30	5.549	3,000

Order example:
EWM-16-500: Stainless steel shaft (AISI 440B) with 16mm Ø, 500mm in length

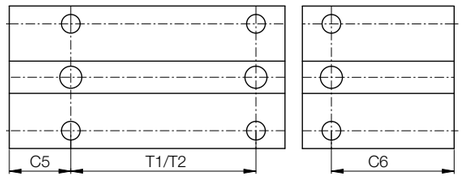
drylin® shafts | Product range

Supported stainless steel shafts

EWUM



STAIN-LESS STEEL



igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

- Completely supported and mounted with standard aluminium support
- For supported shafts:
  - ▶ Shaft support supplied in lengths of 600mm max.
  - ▶ Standard pitch T2, T1 also possible upon request
  - ▶ Symmetrical hole pitches C5 = C6

Dimensions [mm] – supported stainless steel shafts AISI 440B

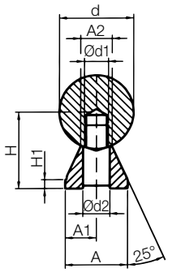
Part No.	D	B	H	V	N1	N2	d1	M	(°)	E	T1	C5/C6		T2	C5/C6		Weight
												Min.	Max.		Min.	Max.	
			±0.02								±0.15	for T1		Standard	for T2 Standard		[kg/m]
EWUM-12	12	40	22	5	8.0	5.0	4.5	5.8	50	29	75	20	57	120	20	79	1.75
EWUM-16	16	45	26	5	9.5	6.0	5.5	7.0	50	33	100	20	69	150	20	94	2.64
EWUM-20	20	52	32	6	11.0	6.5	6.6	8.3	50	37	100	20	69	150	20	94	3.97
EWUM-25	25	57	36	6	14.0	8.5	6.6	10.8	50	42	120	20	79	200	20	119	5.65
EWUM-30	30	69	42	7	17.0	10.5	9.0	11.0	50	51	150	20	94	200	20	119	7.93
EWUM-40	40	73	50	8	17.0	10.5	9.0	15.0	50	55	200	20	119	300	20	169	12.88
EWUM-50	50	84	60	9	19.0	12.5	11.0	19.0	46	63	200	20	119	300	20	169	19.60

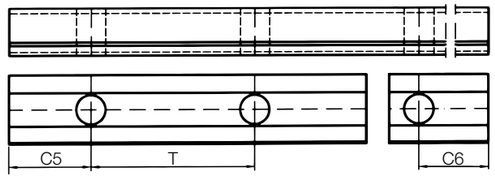
Order example:
EWUM-16-500-T1: Supported stainless steel shaft (AISI 440B) with 16mm outer Ø 500mm length, T1 pitch

drylin® shafts | Product range

Low level supported stainless steel shafts

EWUMN





Order key

Type	Size	Options
EWUMN-	20	-2000-T1

Low level supported stainless steel shaft, metric	Outer Ø	Shaft length [mm]	Hole pattern

EWUM: Supported stainless steel shaft
EWUMN: Low level supported stainless steel shaft

Available materials and lengths:
AISI 440B, max. 6,000mm

Hole pattern:
T2: T2 pitch (standard)
T1: T1 pitch (upon request)

Dimensions [mm] – low level supported stainless steel shafts AISI 440B

Part No.	Outer Ø	H	H1	A	A1	A2	d1	d2	T	C5/C6		Weight
	d	±0.02				±0.02				Min.	Max.	[kg/m]
EWUMN-12	12	14.5	3	11	5.5	5.4	M4	4.5	75	20	57	1.62
EWUMN-16	16	18	3	14	7.0	7.0	M5	5.5	75	20	57	2.54
EWUMN-20	20	22	3	17	8.5	8.1	M6	6.6	75	20	57	3.81
EWUMN-25	25	26	3	21	10.5	10.3	M8	9.0	75	20	57	5.62
EWUMN-30	30	30	3	23	11.5	11.0	M10	11.0	100	20	69.5	7.63
EWUMN-40	40	39	4	30	15.0	15.0	M12	13.5	100	20	69.5	13.47
EWUMN-50	50	46	5	35	17.5	19.0	M14	15.5	100	20	69.5	20.31

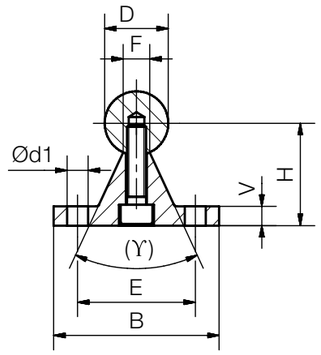
Low level supported shafts are delivered unmounted.

Order example:
EWUMN-16-500: Low level supported stainless steel shaft (AISI 440B) with 16mm outer Ø, 500mm length

drylin® shafts | Product range

Partially supported stainless steel shafts

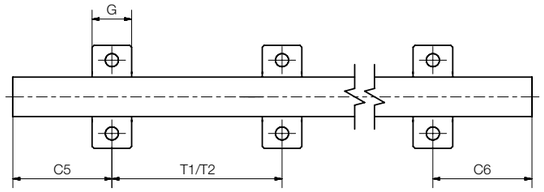
EWUM-ES/
EWUMS-ES



igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Standard shaft support blocks made of stainless steel
- Connection sizes are identical to aluminium supports

▶ **Page 1160**



Dimensions [mm] – partially supported stainless steel shafts AISI 440B

Part No.	D	B	H	V	d1	E	ϒ	F	G	T1	C5/C6 for T1		T2	C5/C6 for T2	
	h6		±0.02								Min.	Max.	Standard	Min.	Max.
EWUM-ES-12	12	40	22	5	4.5	29	–	5.8	14	75	20	57	120	20	79
EWUM-ES-16	16	45	26	5	5.5	33	–	7.0	16	100	20	69	150	20	94
EWUM-ES-20	20	52	32	6	6.6	37	50°	8.3	20	100	20	69	150	20	94
EWUM-ES-25	25	57	36	6	6.6	42	–	10.8	25	150	20	79	200	20	119
EWUM-ES-30	30	69	42	7	9.0	51	–	11.0	25	150	20	94	200	20	119
EWUM-ES-40	40	73	50	8	9.0	55	–	15.0	25	200	20	119	300	20	169

Order example:
EWUM-ES-20-500, partially supported stainless steel shaft (shaft and support made of stainless steel), AISI 440B material, T2 pitch, outer Ø 20mm, L = 500mm

drylin® shafts | Product range

STAIN-LESS STEEL

Order key

Type	Size	Options

EWUMS-ES-20-500-T2

Partially supported stainless steel shaft, metric	Material	Outer Ø	Shaft length [mm]	Hole pattern

Available materials and lengths:
AISI 440B, max. 6,000mm
▶ EWUM
AISI 316Ti, max. 3,000mm
▶ EWUMS

Options:
Blank: AISI 440B material
S: AISI 316Ti
Hole pattern:
T2: T2 pitch (standard)
T1: T1 pitch

Dimensions [mm] – partially supported stainless steel shafts AISI 316Ti

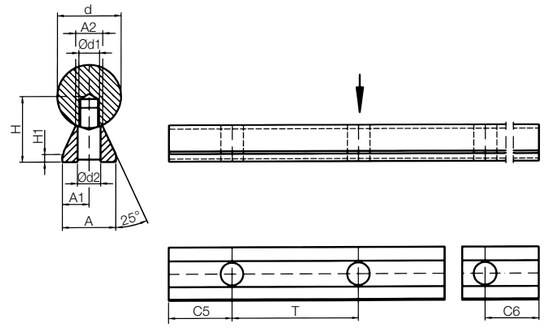
Part No.	D	B	H	V	d1	E	ϒ	F	G	T1	C5/C6 for T1		T2	C5/C6 for T2	
	h6		±0.02								Min.	Max.	Standard	Min.	Max.
EWUMS-ES-12	12	40	22	5	4.5	29	–	5.8	14	75	20	57	120	20	79
EWUMS-ES-16	16	45	26	5	5.5	33	–	7.0	16	100	20	69	150	20	94
EWUMS-ES-20	20	52	32	6	6.6	37	50°	8.3	20	100	20	69	150	20	94
EWUMS-ES-25	25	57	36	6	6.6	42	–	10.8	25	150	20	79	200	20	119
EWUMS-ES-30	30	69	42	7	9.0	51	–	11.0	25	150	20	94	200	20	119
EWUMS-ES-40	40	73	50	8	9.0	55	–	15.0	25	200	20	119	300	20	169

Order example:
EWUM-ES-20-500, partially supported stainless steel shaft (shaft and support made of stainless steel), AISI 316Ti material, T1 pitch, outer Ø 20mm, L = 500mm

drylin® shafts | Product range

Low level partially supported stainless steel shafts

EWUMN-ES/
EWUMSN-ES



igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Low level shaft support blocks made of stainless steel

- Connection sizes are identical to low-level aluminium supports ▶ **Page 1161**

Dimensions [mm] – low level partially supported stainless steel shafts AISI 440B

Part No.	d	H	H1	A	A1	A2	d1	d2	T	C5/C6		Weight
		±0.02								Min.	Max.	[kg/m]
EWUMN-ES-12	12	14.5	3	11	5.5	5.4	M4	4.2	75	20	57.0	1.00
EWUMN-ES-16	16	18.0	3	14	7.0	7.0	M5	5.2	75	20	57.0	1.76
EWUMN-ES-20	20	22.0	3	17	8.5	8.1	M6	6.2	75	20	57.0	2.77
EWUMN-ES-25	25	26.0	3	21	10.5	10.3	M8	8.2	75	20	57.0	4.35
EWUMN-ES-30	30	30.0	3	23	11.5	11.0	M10	10.2	100	20	69.5	6.01
EWUMN-ES-40	40	39.0	4	30	15.0	15.0	M12	12.5	100	20	69.5	10.80

Low-level partially supported stainless steel shafts are supplied unassembled

Order example:
EWUMN-ES-20-500: Low level partially supported stainless steel shafts. AISI 440B material, T2 pitch (standard), 20mm outer Ø, 500mm length

drylin® shafts

drylin® shafts | Product range

STAIN-LESS STEEL

Order key

Type	Size	Options

EWUMSN-ES- 20 -500-T2

Partially supported stainless steel shaft, metric	Material	Outer Ø	Shaft length [mm]	Hole pattern

Available materials and lengths:
AISI 440B, max. 6,000mm
▶ EWUMN
AISI 316Ti, max. 3,000mm
▶ EWUMSN

Dimensions [mm] – low level partially supported stainless steel shafts AISI 316Ti

Part No.	d	H	H1	A	A1	A2	d1	d2	T	C5/C6		Weight
		±0.02								Min.	Max.	[kg/m]
EWUMSN-ES-12	12	14.5	3	11	5.5	5.4	M4	4.2	75	20	57.0	1.00
EWUMSN-ES-16	16	18.0	3	14	7.0	7.0	M5	5.2	75	20	57.0	1.76
EWUMSN-ES-20	20	22.0	3	17	8.5	8.1	M6	6.2	75	20	57.0	2.77
EWUMSN-ES-25	25	26.0	3	21	10.5	10.3	M8	8.2	75	20	57.0	4.35
EWUMSN-ES-30	30	30.0	3	23	11.5	11.0	M10	10.2	100	20	69.5	6.01
EWUMSN-ES-40	40	39.0	4	30	15.0	15.0	M12	12.5	100	20	69.5	10.80

Low-level partially supported stainless steel shafts are supplied unassembled

Order example:
EWUMSN-ES-20-500-T2: Low-level partially supported stainless steel shaft. AISI 316Ti material, T2 pitch, outer Ø 20mm, length 500mm

drylin® shafts | Product range

Carbon fibre shafts

CWM

- Material: CFK composite
- Roundness tolerance: ± 0.05mm
- Diameter tolerance: –0.1mm
- Application temperature: max. +80°C
- Colour: Black

Order key

Type	Size	Options
CW M-	12	-1000
Carbon fibre shaft	Metric	Outer Ø	Shaft length [mm]

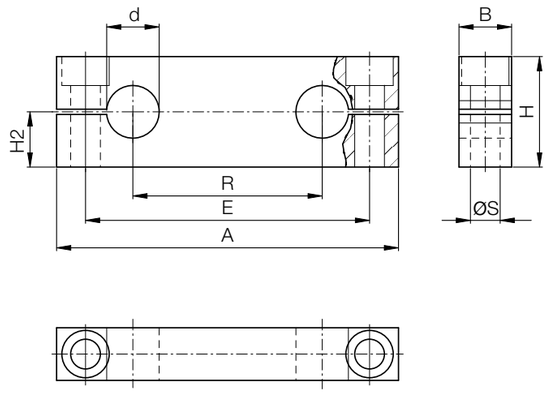
Dimensions [mm]

Part No.	Design	Outer Ø –0.1	Inner Ø –0.1	Max. length	Weight [g]
CWM-12	Hollow shaft	12	9.0	2,000	70
CWM-16	Hollow shaft	16	12.5	2,000	120
CWM-20	Hollow shaft	20	16.0	2,000	170
CWM-30	Hollow shaft	30	26.0	2,000	270

Order example:
CWM-16-500: Carbon fibre shaft, 16mm outer Ø, 500mm length

drylin® shafts | Product range

Shaft end supports, floating



Order key

Type	Size
TA -	08
Shaft end support, floating	Inner Ø

Material: aluminium
Threaded fixing hole

Dimensions [mm]

Part No.	d	A	B	H	H2 ±0.015	Ø S	E	R	Weight [g]
TA-08	8	65	12	22	11	M5	52	32	40
TA-10	10	70	12	21	10.5	M5	55	34	37
TA-12	12	85	14	28	14	M6	70	42	70
TA-16	16	100	18	32	16	M8	82	54	130
TA-20	20	130	20	42	21	M10	108	72	220
TA-25	25	160	25	52	26	M12	132	88	440
TA-30	30	180	25	58	29	M12	150	96	560
TA-40	40	230	30	72	36	M16	190	122	1,000

Order example:
TA-10: floating shaft end support with inner Ø 10mm

drylin® shafts | Product range

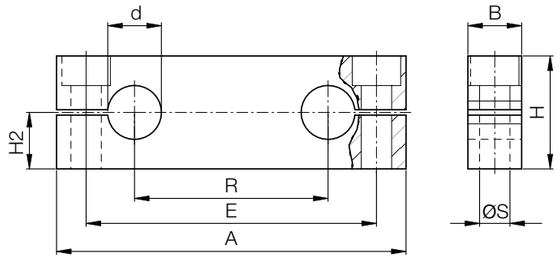
Shaft end supports, fixed

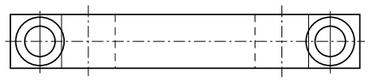
Order key

Type	Size
TA F -	08

Shaft end support | Fixed | Inner Ø

Material: aluminium
Through fixing hole





Dimensions [mm]

Part No.	d	A	B	H	H2 ±0.015	Ø S	E	R	Weight [g]
TAF-08	8	65	12	23	12.5	5.5	52	32	40
TAF-10	10	70	12	25	14.0	5.5	55	34	45
TAF-12	12	85	14	32	18.0	6.6	70	42	90
TAF-16	16	100	18	36	20.0	9.0	82	54	140
TAF-20	20	130	20	46	25.0	11.0	108	72	250
TAF-25	25	160	25	56	30.0	13.5	132	88	470
TAF-30	30	180	25	64	35.0	13.5	150	96	620
TAF-40	40	230	30	80	44.0	17.5	190	122	1,150

Order example:
TAF-12: fixed shaft end support with 12mm inner Ø

drylin® shafts | Product range

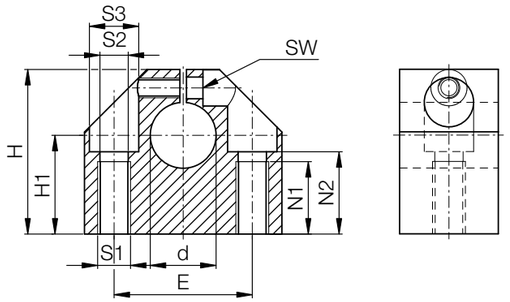
Shaft end blocks, standard design

Order key

Type	Size
WA -	08

Shaft end block Standard design | Inner Ø

Material: aluminium



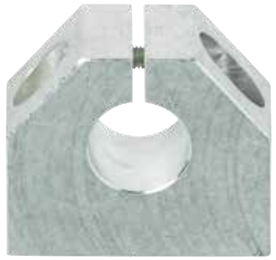
Dimensions [mm]

Part No.	d	B	H	H1 ±0.02	L	S1	S2	S3	E ±0.1	N1	N2	SW	Weight [g]
WA-08	8	18	28	15	32	M4	3.3	6	22	9	13.0	2.5	40
WA-12	12	20	35	20	43	M6	5.2	10	30	13	16.5	3.0	100
WA-16	16	24	42	25	53	M8	6.8	11	38	18	21.0	4.0	150
WA-20	20	30	50	30	60	M10	8.6	15	42	22	25.0	5.0	230
WA-25	25	38	60	35	78	M12	10.3	18	56	26	30.0	6.0	410
WA-30	30	40	70	40	87	M12	10.3	18	64	26	34.0	6.0	530
WA-40	40	48	90	50	108	M16	14.25	20	82	34	44.0	8.0	990
WA-50	50	58	105	60	132	M20	17.5	26	100	43	49.0	10.0	1,250
WA-60	60	74	130	75	164	M27	22	33	124	43	59.0	10.0	2,950

Order example:
WA-08: shaft end block, standard design with inner Ø 8mm

drylin® shafts | Product range

Shaft end blocks, compact design

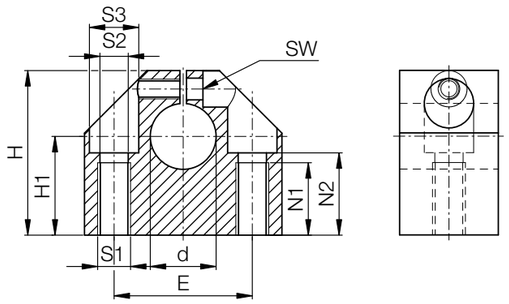


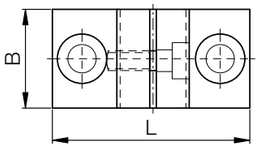
Order key

Type	Size
WA C - 06	

Shaft end block | Compact design | Inner Ø

Material: aluminium





Dimensions [mm]

Part No.	d	B	H	H1 from +0.01 to +0.02	L	S1	S2	S3	E ±0.1	N1	N2	SW	Weight [g]
WAC-06	6	16	27	15	32	M5	4.2	8	22	11	13	2.5	30
WAC-08	8	16	27	16	32	M5	4.2	8	22	11	13	2.5	30
WAC-10	10	18	33	18	40	M6	5.2	10	27	13	16	3.0	50
WAC-12	12	18	33	19	40	M6	5.2	10	27	13	16	3.0	50
WAC-14	14	20	38	20	45	M6	5.2	10	32	13	18	3.0	70
WAC-16	16	20	38	22	45	M6	5.2	10	32	13	18	3.0	70
WAC-20	20	24	45	25	53	M8	6.8	11	39	18	22	4.0	120
WAC-25	25	28	54	31	62	M10	8.6	15	44	22	26	5.0	170
WAC-30	30	30	60	34	67	M10	8.6	15	49	22	29	5.0	220
WAC-40	40	40	76	42	87	M12	10.3	18	66	26	38	6.0	480
WAC-50	50	50	92	50	103	M16	14.25	20	80	34	46	8.0	820

Order example:
WAC-12: shaft end block, compact design with inner Ø 12mm

drylin® shafts | Product range

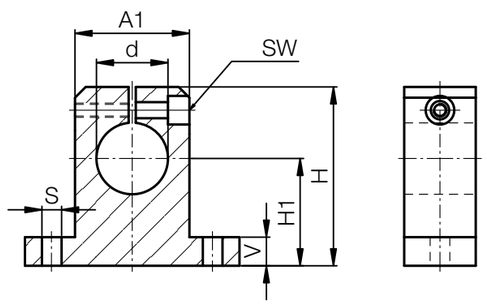
Shaft end blocks, narrow design

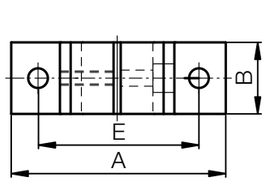
Order key

Type	Size
WA S - 08	

Shaft end block | Narrow design | Inner Ø

Material: aluminium





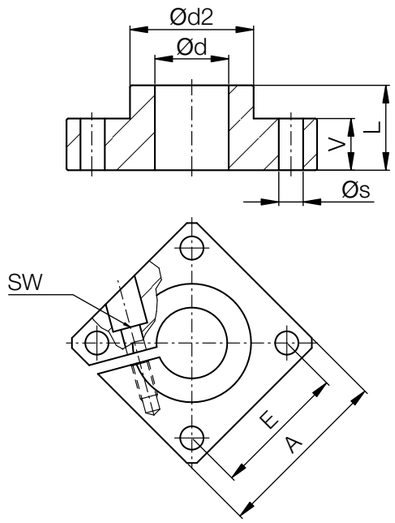
Dimensions [mm]

Part No.	d	H	H1 ±0.02	A	A1	B	E	S	V	SW	Weight [g]
WAS-08	8	27	15	32	16	10	25	4.5	5.0	2.5	12
WAS-12	12	35	20	42	20	12	32	5.5	5.5	3.0	23
WAS-16	16	42	25	50	26	16	40	5.5	6.5	3.0	35
WAS-20	20	50	30	60	32	20	45	5.5	8.0	4.0	67
WAS-25	25	58	35	74	38	25	60	6.6	9.0	4.0	140
WAS-30	30	68	40	84	45	28	68	9.0	10.0	5.0	200
WAS-40	40	86	50	108	56	32	86	11.0	12.0	6.0	480

Order example:
WAS-12: shaft end block, narrow design with inner Ø 12mm

drylin® shafts | Product range

Flanged shaft end block



Order key

Type	Size
WA F	-12

Shaft end block
With flange
Inner Ø

Material: aluminium

Dimensions [mm]

Part No.	Ø d	A	L	Ø d2	E	Ø s	V	SW	Weight [g]
WAF-12	12	40	20	23.5	30 ± 0.12	5.5	12	3	60
WAF-16	16	50	20	27.5	35 ± 0.12	5.5	12	3	80
WAF-20	20	50	23	33.5	38 ± 0.15	6.6	14	4	100
WAF-25	25	60	25	42.0	42 ± 0.15	6.6	16	5	150
WAF-30	30	70	30	49.5	54 ± 0.15	9.0	19	6	300
WAF-40	40	100	40	65.0	68 ± 0.25	11.0	26	8	700
WAF-50	50	100	50	75.0	75 ± 0.25	11.0	36	8	1,200

Order example:
WAF-16: Flange shaft support with inner Ø 16mm

drylin® expert 2.0 | Online tools

Expert for linear guides: System selection and service life calculation with CAD

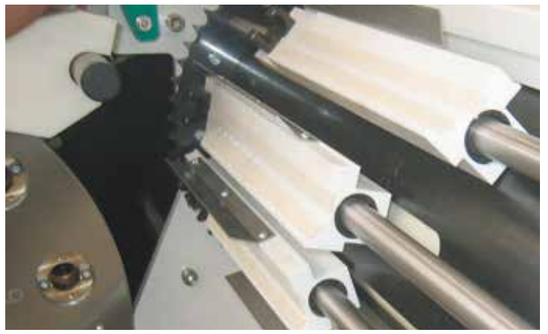
Configure linear bearings and calculate their service life – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.

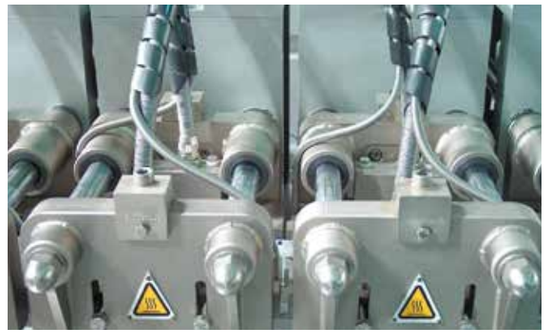
▶ **www.igus.eu/drylin-expert**

Download the online tool app now

Download on the App Store

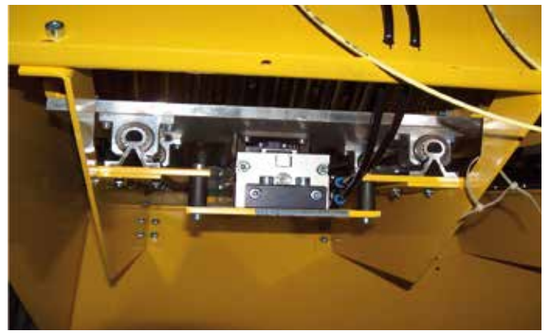


Aluminium shafts in combination with iglidur® J enable high speeds due to the lightweight.



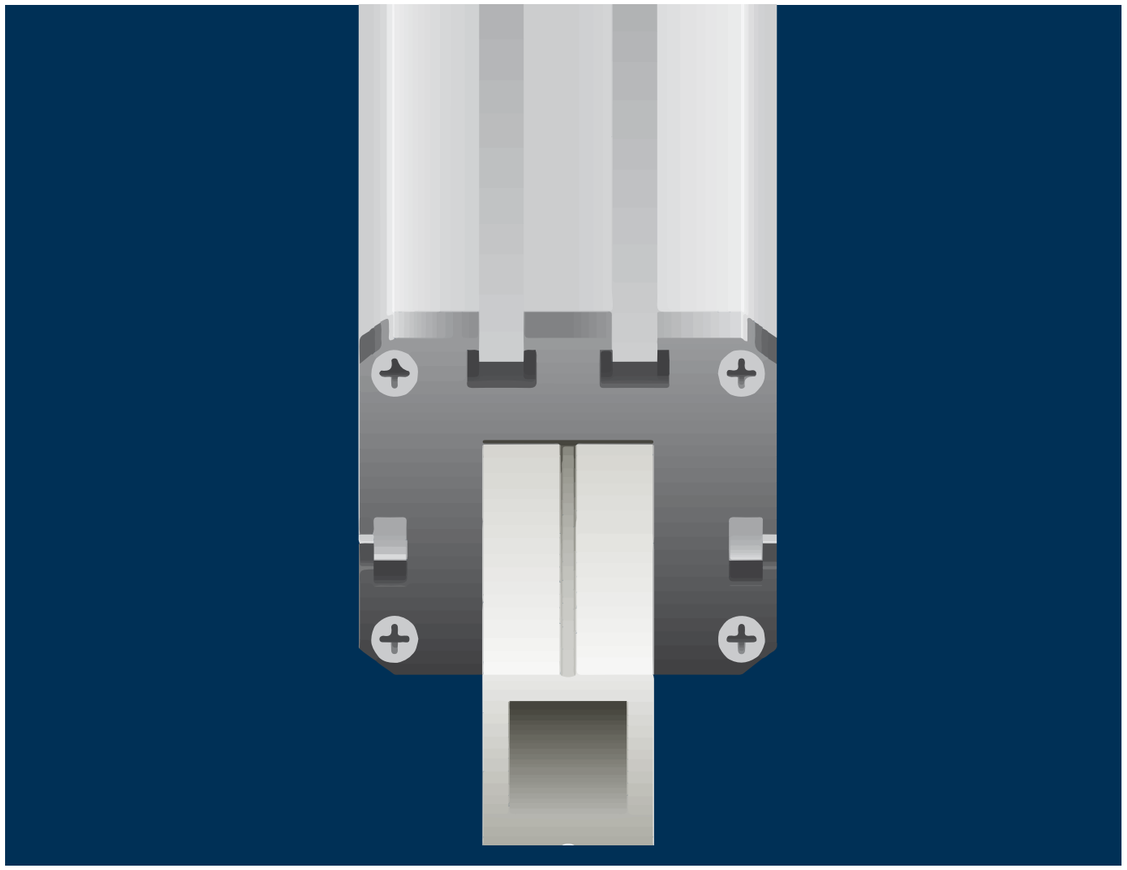
Stainless steel shafts combined with iglidur® X, offer maximum resistance at +120°C. Cleaning in filling machine.

Stainless steel combined with iglidur® J in cut-off grinding machine. Grinding particles and coolants, extreme conditions.



Cost-effective guide for work piece carriage in a machine tool with supported aluminium shaft.

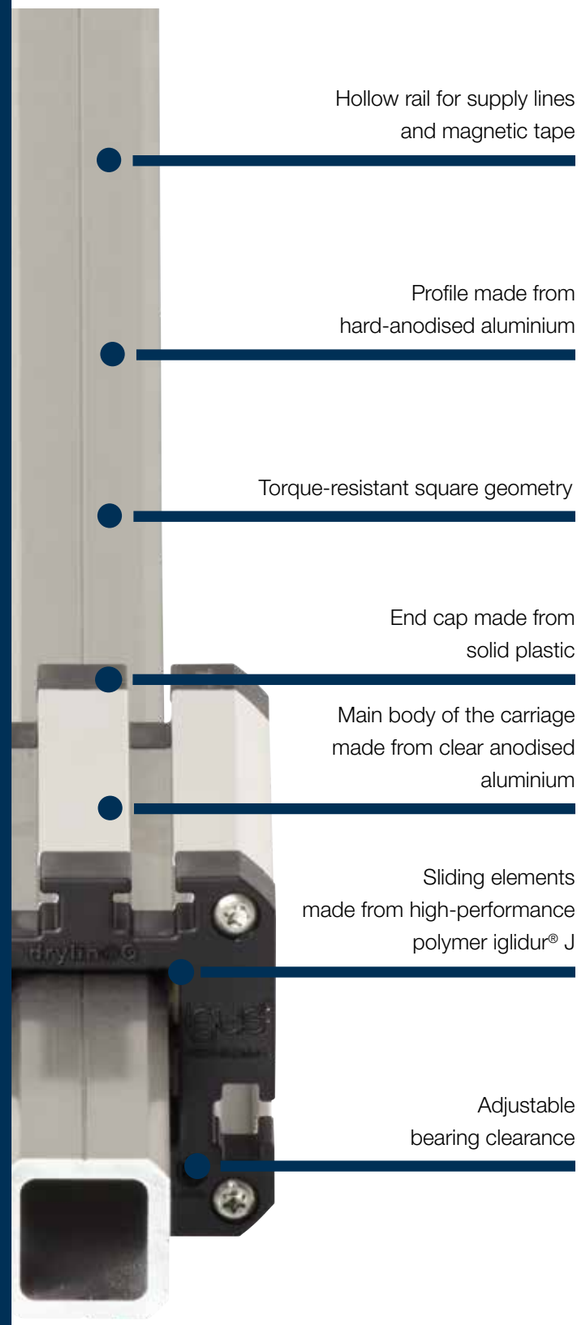
My sketches



drylin® linear technology – drylin® Q square linear guides

- Torque-resistant linear guides
- Square section linear rail made from hard-anodised aluminium
- Apply moments up to 10Nm
- Adjustable linear carriage with or without manual clamp
- Lubrication-free and lightweight

Torque-resistant, space-saving, light, unsupported installation



Lubrication-free square linear guides – drylin® Q

Linear movement with torque resistance, completely lubrication-free. The drylin® Q linear system offers the user maximum flexibility in the design. Individual housing options such as solid plastic bearings or adjustable housings with or without manual clamp are available. Due to the hollow design, the robust hard-anodised aluminium profile is very light and is suitable for the installation of supply cables. Options for mounting are extensive, among others, using slot nuts; installation size 20 can also be combined with all 20/20 aluminium profiles.

- 100% lubrication-free
- Torque-resistant
- Adjustable bearing clearance
- Applied forces from all directions possible
- Dirt resistance
- Low vibration and quiet
- Numerous mounting options

Typical application areas

- Mechanical engineering
- Wood working industry
- Machine tools
- Handling

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +90°C
Min. –40°C

3 installation sizes (10/12/20)
Rail length: 1,500/3,000mm

Technical details on floating bearings, 2:1 Rule, tightening torque for drylin® metallic screws ▶ Page 963

Linear system with individual housing versions

Square section linear rails

- Material: aluminium, hard-anodised
- Lightweight and corrosion-resistant
- Hollow rail design for cables to feed-through

▶ Page 1178

Linear carriage

- Unsupported carriage version with/without manual clamp
- Numerous fastening options on all sides via slot nuts
- Bearing clearance adjustable

▶ Page 1179

Bearing housing

- Enclosed anodised aluminium housing
- Apply moments up to 3Nm (size 10), 10Nm (size 20)
- Torque-resistant sliding elements made from iglidur® J

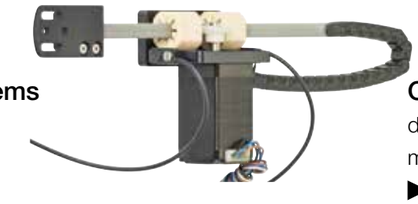
▶ Page 1181

Sliding plates for clearance adjustment

- Tolerance compensation for profiles, including lifting columns
- Adjustment mechanism included
- Easy assembly

▶ Page 1185

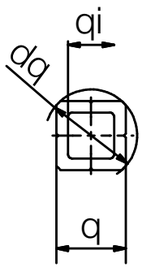
Measuring systems
drylin® QKM
▶ Page 1187



Cantilever axis
drylin® GRQ miniature linear module
▶ Page 1443

drylin® Q square linear guides | Product range

Square section linear rails



Order key

Type	Size	Option
AW M Q -	10	-1000

- Aluminium shaft
- Metric
- Square design
- Installation size
- Length [mm]

Minimum saw lengths
▶ Page 961

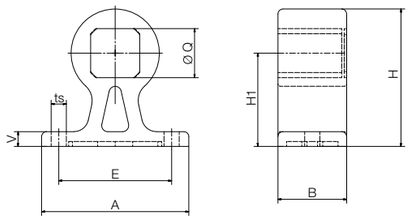
Dimensions [mm]

Part No.	Weight [kg/m]	q	dq	qi ±0.02	Max. length
AWMQ-10	0.082	7.5	10	5	1,500
AWMQ-12	0.193	12	16	8.5	1,500
AWMQ-20	0.46	20	25	15	3,000

Accessories

Shaft end supports made from plastic

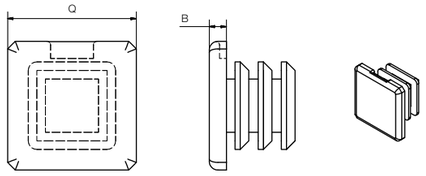
- Cost-effective mounting option
- Can also be used as floating bearing



Dimensions [mm]

Part No.	A	H	B	Q	H1	E	ts	V
STZ-Q10-01-FL	30	21	14	7.5	14	20	3.3	3
STZ-Q20-01-FL	60	56	28	20	38	46	6.2	6

End caps for square section linear rail



Dimensions [mm]

Part No.	Q	B
STZ-Q10-01-C	7.5	1
STZ-Q20-01-C	20	5

drylin® Q square linear guides

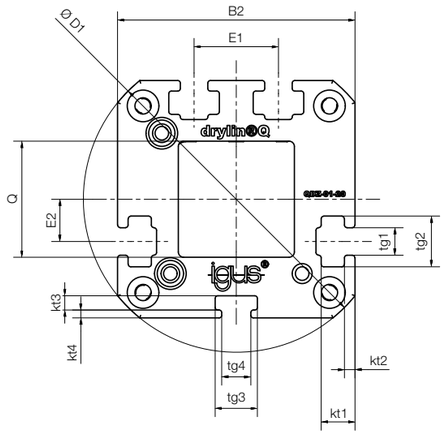
drylin® Q square linear guides | Product range

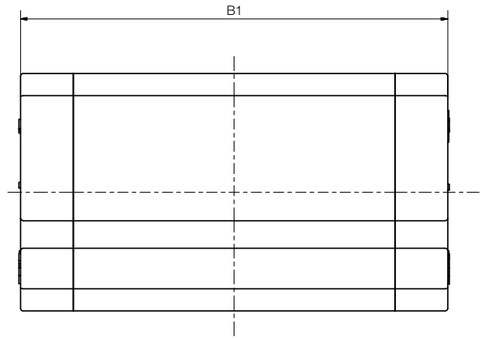
Adjustable linear carriage

Order key

Type	Size
Q W E -	01 - 20

- Square
- Linear carriage
- Adjustable
- Standard design
- Installation size





Dimensions [mm]

Part No.	Weight [g]	M max. [Nm]	B1	B2 h7	D1	Q	E1	E2	tg1	tg2	tg3	tg4	kt1	kt2	kt3	kt4
QWE-01-12	110	5	80	34	44	12	12	6	5.5	8	8	–	–	–	3	1.25
QWE-01-20	210	10	81	45	58	20	16	8	5.5	9.6	8	5.5	6.4	2	2.7	1.5

Accessories: Slot nuts

Slot nuts offers attachment options (for example sensors) on four sides of the housing. 8 pieces are included in the delivery of a QWE carriage.
Part No.: **NOR-20602**

Can be combined with:

AWMQ-12

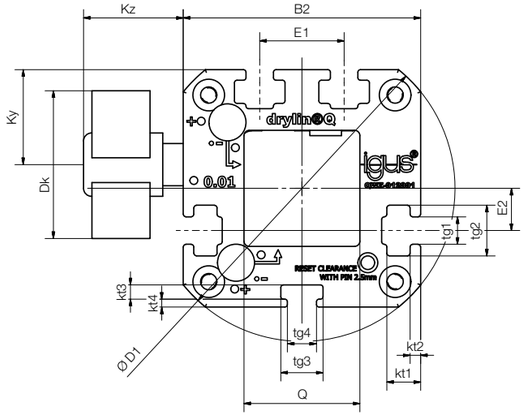
AWMQ-20

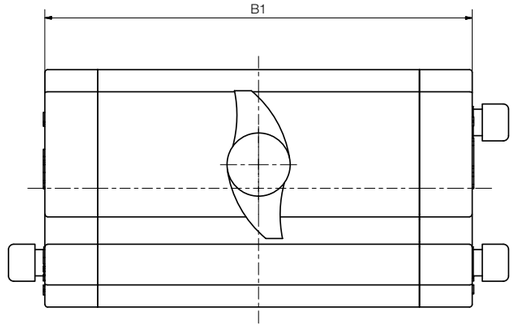
drylin® Q square linear guides | Product range

Adjustable linear carriage with manual clamp

Order key

Type				Size	Options
Q	W	E	- 01 -	20	- HKA
Square	Linear carriage	Adjustable	Standard design	Installation size	Manual clamp





Dimensions [mm]

Part No.	Weight	M max.	B1	B2	D1	Q	E1	E2	tg1	tg2	tg3	tg4
	[g]	[Nm]		h7								
QWE-01-12-HKA	–	–	80	34	44	12	12	6	5.5	8	8	–
QWE-01-20-HKA	215	10	81	45	58	20	16	8	5.2	9.6	8	5.5

Part No.	kt1	kt2	kt3	kt4	Dk	Ky	Kz
QWE-01-12-HKA	–	–	3	1.25	18	14	19
QWE-01-20-HKA	6.4	2	2.7	1.5	28	18	19

The manual clamp thread was developed for simple tasks. The creep behaviour of the clamped plastic causes a reduction in clamping force over time (up to 70%). Therefore no safety-relevant parts may be clamped. Please contact our technical consultant, if you require other options for the clamping.

Can be combined with:

AWMQ-20

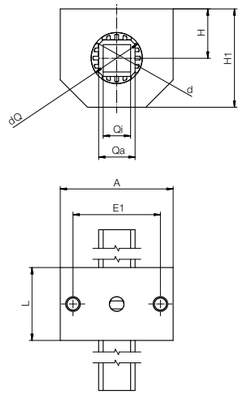
drylin® Q square linear guides | Product range

Q20 pillow blocks

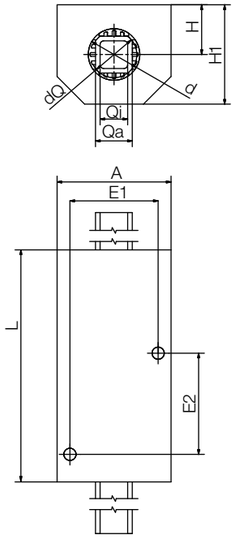
Order key

Type							Size	
Q	J	R	M	T	- 05	- 20		
Square	iglidur® J	Closed design	Metric	Tandem (optional)	Compact design	Installation size		

QJRM-05-20



QJRMT-05-20



Technical data [mm]

Part No.	Weight	Mx	Surface pressure	
	[kg]	[Nm]	dynamic [N]	static [N]
QJRM-05-20	0.25	5	1,500	10,500
QJRMT-05-20	0.55	10	1,500	10,500

Dimensions [mm]

Part No.	A	H	H1	dQ	Qa	Qi	E1	E2	d	L
		±0.02					±0.15	±0.15		
QJRM-05-20	62	27	54	25	20	15	48	–	28	40
QJRMT-05-20	62	27	54	25	20	15	48	55	28	85

Can be combined with:

AWMQ-20

drylin® Q square linear guides | Product range

With flange

QJFM-02-...

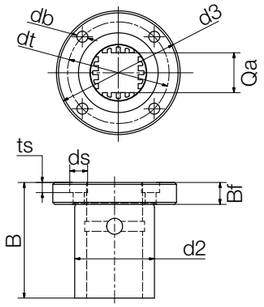
QJFMT-01-...

Order key

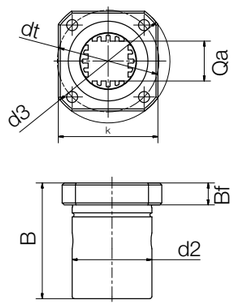
Type					Option	Size
Q	J	F	M	T	- 02	- 10
Square	iglidur® J	With flange	Metric	Tandem (optional)	Design	Installation size

Options:
01 = Round flange
02 = Square flange

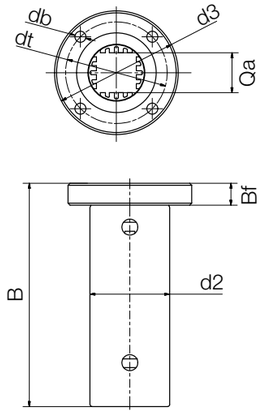
QJFM-01



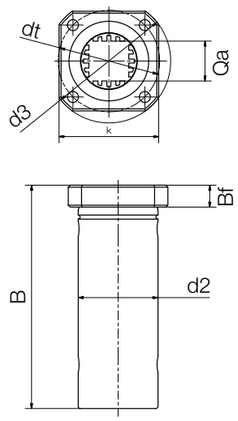
QJFM-02



QJFMT-01



QJFMT-02



Technical data and dimensions [mm]

Part No.	Weight	Surface pressure		Mx
	[kg]	dynamic [N]	static [N]	[Nm]
QJFM-01-20	0.14	1,500	10,500	5
QJFM-02-20	0.14	1,500	10,500	5
QJFMT-02-10	0.038	–	–	3
QJFMT-01-20	0.24	1,500	10,500	10
QJFMT-02-20	0.24	1,500	10,500	10

Part No.	k	d2	Bf	Qa	d3	dt	B	db	ds	ts
		h7			±0.15	±0.15				
QJFM-01-20	–	40	11	20	62	51	58	5.5	9.0	5.1
QJFM-02-20	50	40	11	20	62	51	58	5.5	9.0	5.1
QJFMT-02-10	30	19	9	7.5	39	29	52	4.5	7.5	4.1
QJFMT-01-20	–	40	11	20	62	51	112	5.5	9.0	5.1
QJFMT-02-20	50	40	11	20	62	51	112	5.5	9.0	5.1

Can be combined with:

AWMQ-10

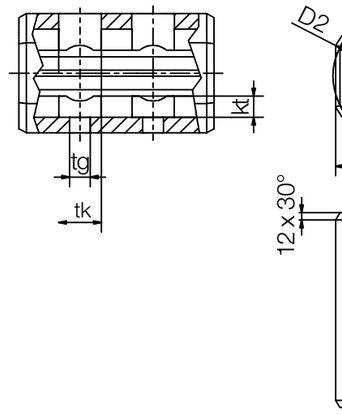
AWMQ-20

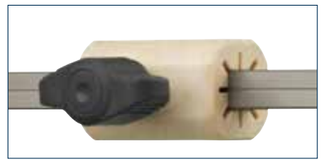
drylin® Q square linear guides | Product range

Q10 pillow blocks

Order key

Type						Size
Q	J	R	M	P	- 01	- 10
Square	iglidur® J	Closed design	Metric	Solid plastic	Standard design	Installation size

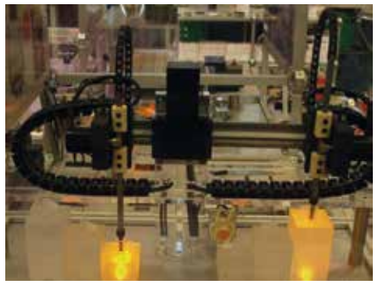




Manual clamp available.
Suffix "-HKA"

Dimensions [mm]

Part No.	Weight	M max.	B	B2	D2	dn	E	Q	tk	tg	kt
	[g]	[Nm]									
QJRMP-01-10	11.3	3	32	9.8	22	22	12	7.5	6	3.4	3.5



Pipette unit equipped with drylin® Q square linear guide combined with drylin® GRW cantilever axis and NEMA stepper motor

Can be combined with:

AWMQ-10

drylin® Q square linear guides | Product range

Accessories

- Hollow rail for supply lines (compressed air, cable)
- Small space requirement
- A host of possible applications

Single components

Adapter for flange shaft block

Part No.
STZ-Q10-AR-1012-16

Adapter kit e.g. for grippers/sensors

Part No.
STZ-Q10-01-AM

Plastic shaft end supports

Part No.
STZ-Q10-01-FL
STZ-Q10-01-LL

Chain connection for e-chain® E2 micro

Part No.
STZ-Q10-01-AC-E2

End caps for square-section rail

Part No.
STZ-Q10-01-C
STZ-Q20-01-C

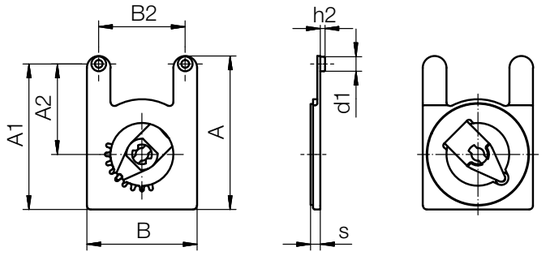
drylin® Q square linear guides | Product range New

Clearance adjustment for columns

- Clearance-reduced guidance of the lifting columns by adjustment mechanism
- Low-cost due to injection moulding
- Lightweight solid plastic solution
- Lubrication-free, wear-resistant, maintenance-free due to dry-tech® polymer iglidur® J
- Corrosion-free

Order key

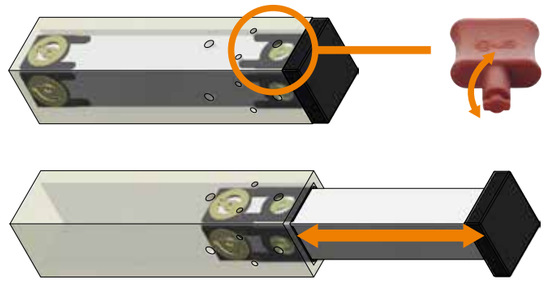
Type	Option	Size
ASD	J -	28 - 025
Type	iglidur® J	Width B	Installation size



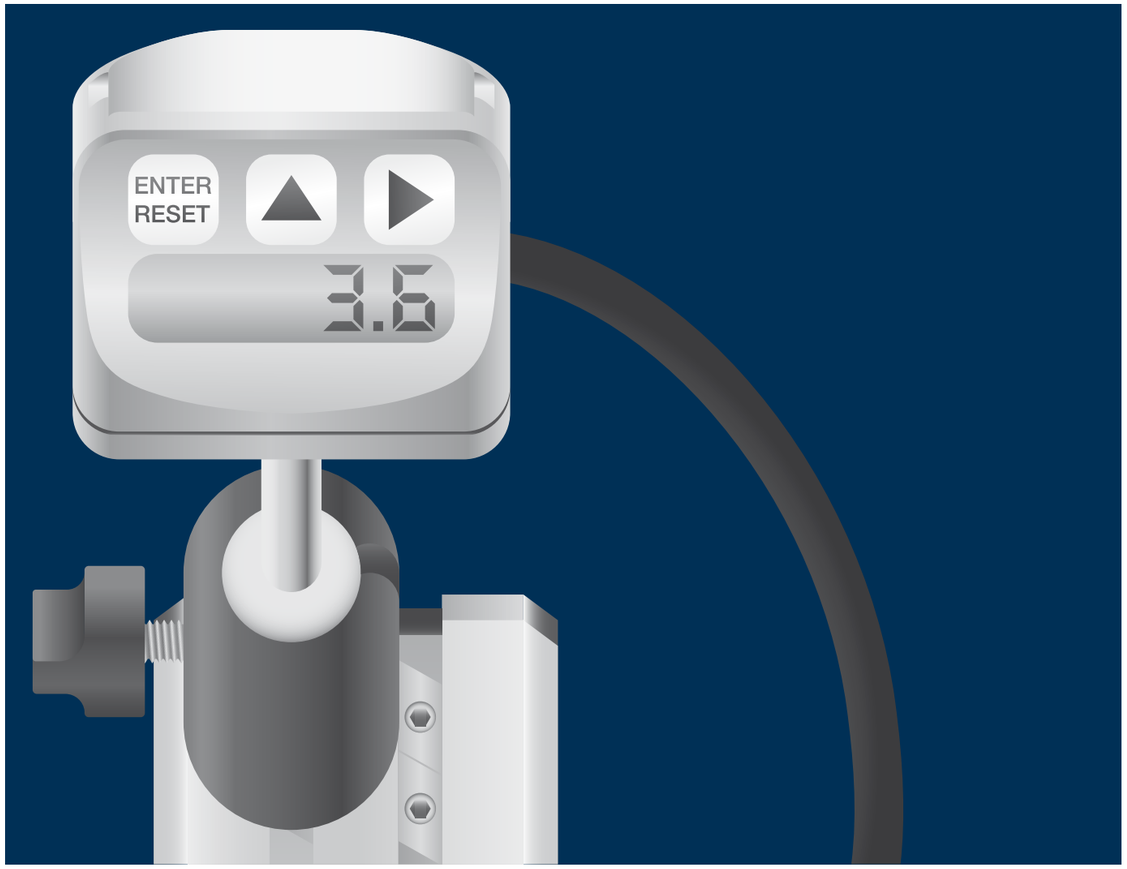
Dimensions [mm]

Part No.		Weight	s		A	B	A1	A2	B2	d1	h2
		[g]	Min.	Max.					±0.15	–0.1	±0.1
ASDJ-28-025	New	1.9	2.2	2.8	39	28	37	23	22	3.7	1.2

Adjustment key Part No.
ASDZ-012817



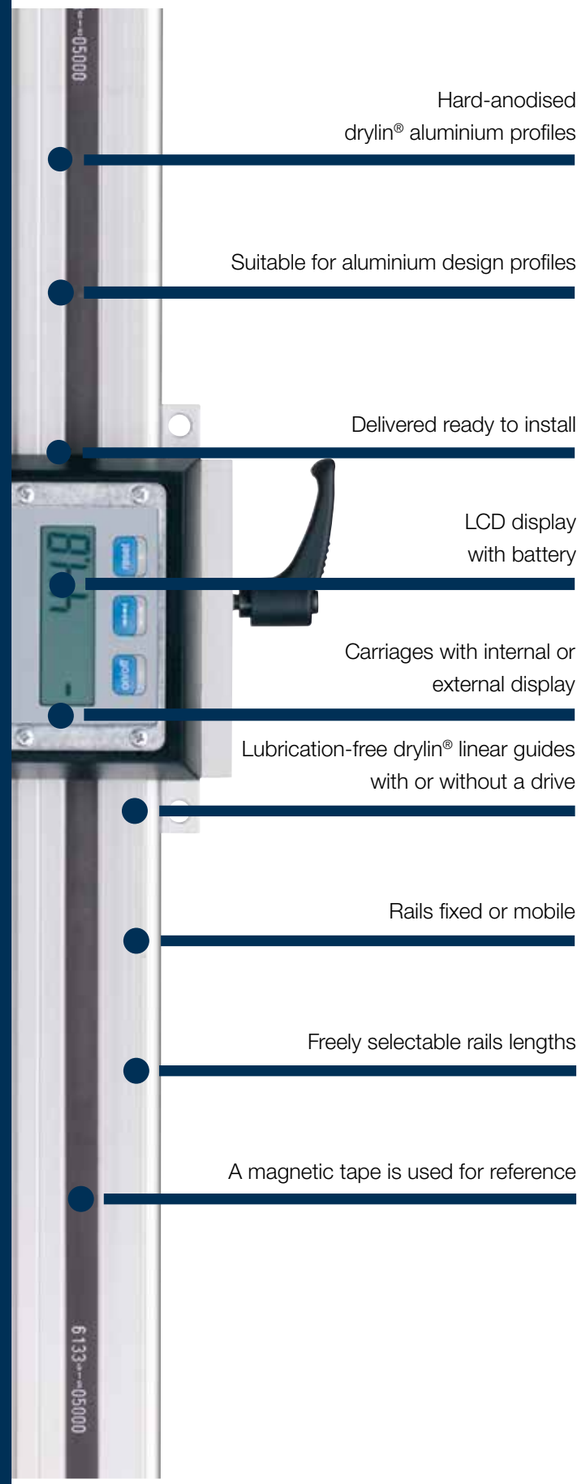
My sketches



drylin® linear technology – Digital measuring systems

- Ready-to-install complete systems
- Sensor, measuring display, magnetic tape included
- Battery operation
- Ideal for positional stops
- Operation without mains supply

Lubrication-free, light, quiet, long service life, cost-effective



Digital drylin® measuring systems

The drylin® measuring systems use magnetic tape with incremental measuring systems. The integrated battery ensures a service life of many years and enables almost absolute measurement. The sensor, measuring display and magnetic tape are integrated in lubrication-free drylin® W and Q linear guides. With customer-specific rail lengths, systems are supplied as ready-to-install linear modules. Typical application areas are format adjustments and mechanical stop adjustments.

- Simple installation
- Easy to adjust
- Lubrication and maintenance-free
- Battery powered
- Unsupported use
- Optional:
  Mounted rail -> measuring carriage moves
  Mounted measuring rail -> rail moves

Typical application areas

- Format adjustments
- Bending machines
- Band saws
- Stop-dog positioning for profiles, frames, plates, tubes, wood and bar stock

Available from stock
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +70°C
Min. –10°C

Carriage widths: 45–134mm
Rail length: up to 4,000mm

Profile guides for almost unlimited design freedom

drylin® Q for unsupported structures

- Carriage with integrated measuring sensor
- With fixed or flexible adjustable display
- Protected magnetic tape

▶ **Page 1192**

drylin® SLW with integrated measuring sensor

- Driven by trapezoidal thread
- Programmable display
- Positioning can be freely adjusted and locked

▶ **Page 1193**

drylin® W with digital measuring display

- Max. rail length up to 4,000mm
- Measuring display attached to the side of the carriage
- Lubrication-free adjusting of the carriage

▶ **Page 1194**

drylin® W with fixed measuring display

- Max. rail length: up to 2,000mm
- Measuring display fixed in place
- Moving rail with stationary carriage

▶ **Page 1194**

drylin® W with external measuring display

- Carriage with integrated sensor
- Flexible positioning of the measuring sensor
- Including manual clamp

▶ **Page 1195**

drylin® W for external data output

- Variable sensor type, output power and cable length
- Cable guide and protection through igus® e-chain®
- 1 and 4 edge triggering

▶ **Page 1196**

Stop motion measuring system with rail scale

- econ measuring system based on drylin® pre-load prism slide
- Carriages with individually adjustable pre-load in 4 different strengths
- Including scaling on the rail

▶ **Page 1197**

Measuring display for series SLWM/QKM

Properties	
Measuring principle	Incremental, with zero function
Display	LCD display 7.5mm high digits
Display accuracy	Max. 0.1mm
Display/display area	–99999 …+99999
Function	Digit direction, decimal point, unit of measurement (mm, imperial), preset activation
Power supply	Battery 1/2 AA, 3.6 V integrated, service life of up to 4 years
Magnetic sensor	Securely connected (external)
Design	Installation housing
Housing	Plastic
Protection class	IP54 display IP67 sensor
Working temperature	0…+50°C
Humidity	35-85%
Speed	Max. 2.5m/s
Display keyboard	3 function buttons

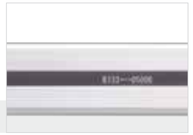
Measuring displays for series WKM2/WKMEDR

Properties	
Measuring principle	Incremental, with absolute value function
Display	Low power LCD with integrated sensor, quasi absolute, battery operated
Display accuracy	Max. 0.1mm
Repeatability	± 1 digit
Display/display area	–99999 …+99999
Function	Freely programmable, e.g. parameter, resolution or offset
Resolution	0.01 0.05 0.1 1mm 0.001, 0.01 inch Freely programmable angled display
Keys	3 keys, membrane keypad
Power supply	Battery integrated, service life of up to 10 years
Magnetic sensor	Securely connected
Reading distance	≤ 1.5mm integrated sensor ≤ 2mm external Sensor
Design	Installation housing
Housing	Zinc die-casting
Protection class	IP20 overall device IP60 display page
Working temperature	0…+60°C
Humidity	≤ 95% rel. humidity, condensation not permissible
Speed	≤ 10m/s
EMC	EN61000-6-2 interference immunity / immission EN 61326-1 emitted interference / emission (class B)

Length measuring system WKMEX

Properties	
Measuring principle	Incremental
Repeatability	± 0.025mm
Measuring principle	Linear
Pole division	5mm
Sensor housing	Zinc die-casting
Protection class	IP67
Application temperature	–10 … +70°C
Bearing temperature	–25 … +85°C
Max. humidity	95%, non-condensing
Max. speed	4.0m/s
VDC power supply	5 VDC or 10… 30 VDC
Current draw	5 VDC: max. 200mA 10.. 30 VDC: max. 150mA
Evaluation electronics	Sensor with integrated evaluation electronics and index impulse
Output power	5 V-TTL line driver or 10.. 30 V_HTL
Source tracks	A, A‘,B, B‘, Z, Z‘
Max. cable length	Max. cable length 5V/5V-TTL: 10m 10-30V/10-30V: 30m 10-30V/5V-TTL: 50m
Max. permissible distance from magnetic tape	2.0mm
Connection method	Open cable ends

Magnetic tape for measuring display WKM



Properties	
Encoding	Incremental, single-track system
Basic pole division	5mm pole division
Band width	10mm
Operating temperature, processed	0° ... +60°C
Tape structure	Magnetic tape stuck on with adhesive tape
External magnetic influence	External magnetic fields on the magnetic tape surface must not exceed 64 mT (640 Oe; 52KA/m) as this can damage or destroy the magnetic tape encoding
Protection class	Carrier tape, stainless steel (optional)

Digital drylin® measuring systems | Product range

Integrated measuring systems

Order key

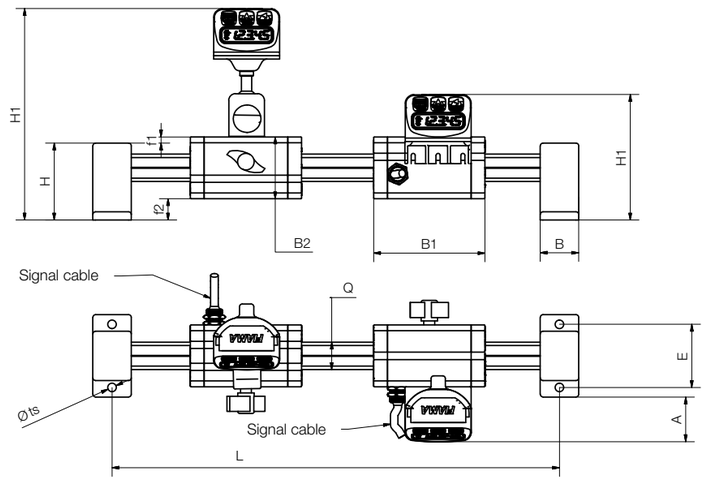
Type	Option	Size
Q K M -	01 -	20
Square	Measuring system	Carriage type	Installation size
	Metric		

Options:

01: Display flexible with angle joint

02: Display fixed in place

- Protected magnetic tape
- Attachment options using slot nuts
- Manual clamp on carriage
- Unsupported attachment
- Profile AWMQ-20 max. length 1,500mm
- Sensor integrated in the carriage, saving space
- Technical data ▶ **Page 1190**



QKM-02-20 QKM-01-20

Dimensions [mm]

Part No.	M max. [Nm]	L Shaft end support + carriage + stroke	B h7	B1	B2	H	H1	E	Q	ts	f1	f2	A
QKM-01-20	10	28 + 94 + stroke	28	94	45	58	155	46	20	6.2	4.5	15.5	33
QKM-02-20	10	28 + 94 + stroke	28	94	45	58	92	46	20	6.2	4.5	15.5	33

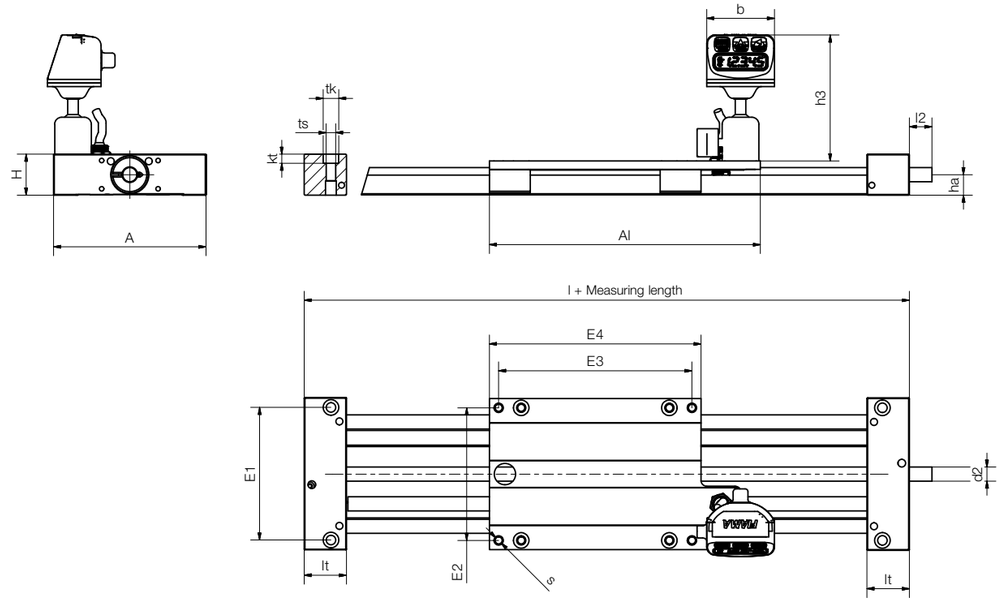
Digital drylin® measuring systems | Product range

Ready-to-install systems for external data output

Order key

Type	Size
S L W M -	1080
drylin® SLW linear module	Measuring system	Installation size SLW linear module

- Sensor integrated in the carriage, saving space
- Operation without mains supply
- Integrated magnetic tape
- Extensive accessories available
- Technical data ▶ **Page 1190**
- Technical data drylin® linear module SLW ▶ **page 1383**



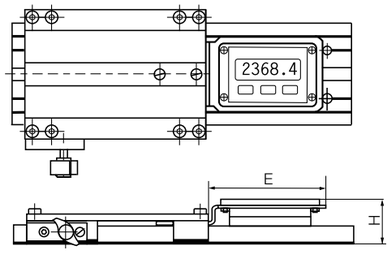
Dimensions [mm]

Part No.	A	Al	H	E1	E2	E3	E4	l	l2	lt	tk	kt	ts	s	ha	d2	h3	b
SLWM-1080	108	192	29	94	94	137	150	236	17	22	11	6.4	6.8	6.6	14.5	Tr10x2	90	50

Digital drylin® measuring systems | Product range

Digital measuring systems with position readout

WKM2, series 10 and 20



Order key

Type	Design

WKM2 -10-80-15-01-R

drylin® W measuring system	Installation size	Rail width	Carriage length	Number of carriages	Display right-mounted

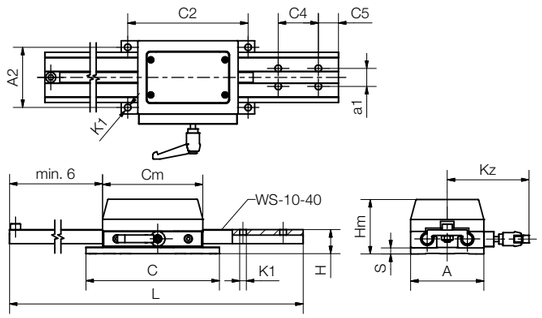
- Lockable carriage
- Display optionally to the right (R) or left (L) of the guide carriage
- Max. rail length 4,000mm (effective measuring length max. 3,757mm)
- Technical data ▶ **Page 1191**

Dimensions [mm]

Part No.	drylin® rail profile[89]	H	E
WKM2-10-80-15-01-L	WS-10-80	36	93
WKM2-10-80-15-01-R	WS-10-80	36	93
WKM2-20-80-15-01-L	WS-20-80	40	93
WKM2-20-80-15-01-R	WS-20-80	40	93

[89] Profile dimensions ▶ Page 960

WKM2, series 11

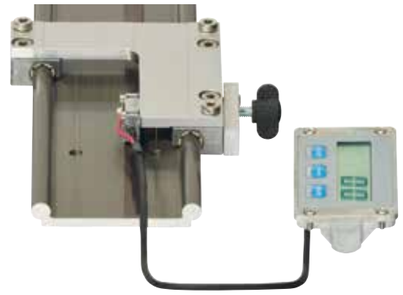


Dimensions [mm]

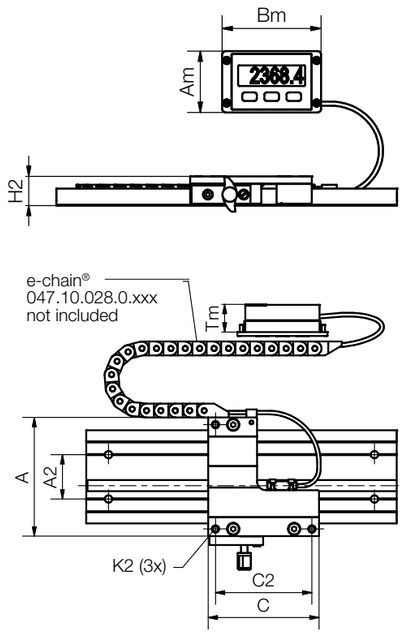
Part No.	L	C4	C5	a1	C2	A2	K1	C	A	H	S	Cm	Hm	kz
	Max.													
WKM2-11-40	2,000	40	20	18	120	60	6.6	133	73	24	6	100	54	82

Digital drylin® measuring systems | Product range

Measuring system with positionable readout display



- Technical data ▶ **Page 1190**



Order key

Type	Size

WKMEDR - 10-80-10-0,3-01-2400

drylin® W measuring system	External Display	Assembly right	Installation size	Rail width	Carriage length	Cable length[165]	One measuring carriage per rail	Rail length [mm]

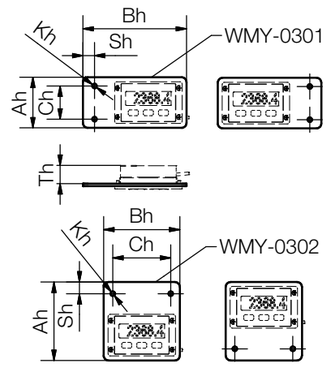
Options:

R: Assembly to the right of the guide carriage

L: Assembly to the left of the guide carriage

[165] **Cable length:**

Cable length between sensor and display [m] (0.1/0.2/0.3 up to max. 2.0)



Assembly options of the external display

Dimensions [mm]

Part No.	A	C	A2	C2	K2	H2	Am	Bm	Tm
	Width	Length				±0.17			
WKMED-□[90]-10-80-10	107	100	94	87	M6	24	82	51	25
WKMED-□2[90]-10-80-10	107	100	94	87	M6	24	82	51	25

[90] Suitable for assembly on the right (R) or left (L)

Bracket dimensions [mm]

Part No.	Ah	Bh	Ch	Sh	Kh	Th
WMY-0301	61	125	40	14	Ø5.4	22
WMY-0302	94.5	92	70	14	Ø5.4	22

Digital drylin® measuring systems | Product range

Ready-to-install system for external data output

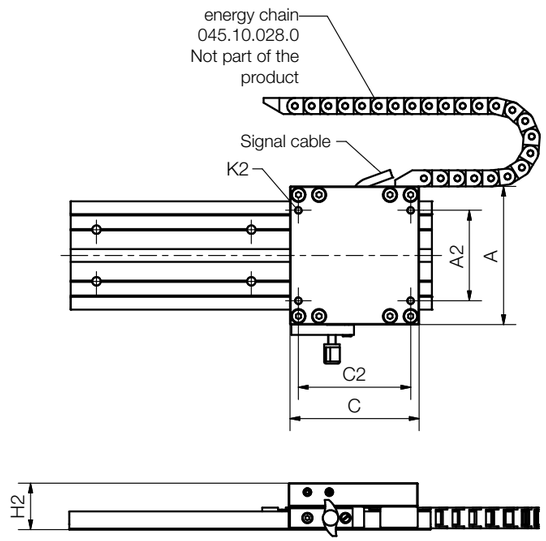
Order key

Type	Size/Design

WKM EX-10-80-10-2.5-00-01-1000

drylin® W measuring system	External data output	Installation size (shaft Ø)	Rail width	Rail length 100mm	Cable length [m]	Sensor version	Number of carriages	Rail length [mm]

- At 4 edge triggering (setting parameters of the display or control system, for example. IW4) and +20°C ambient temperature: resolution: ±(0.025 + 0.02 · L) L = measurement length in metres; repeatability: ±0.025mm
- At 1 edge triggering (setting parameters of the display or control system, for example. IW1) and +20°C ambient temperature: resolution: ±(0.1 + 0.02 · L) L = measurement length in metres; repeatability: ±0.025mm
- Small sensor with integrated evaluation electronics
- Output signals: Differential mode sustained short circuit-proof with inverted signals (A. A/, B, B/, Z, Z/)
- Technical data ▶ **Page 1191**



Dimensions [mm]

Part No.	H2	C	C2	A	A2	K2	Resolution
WKMEX-10-80	36	100	87	107	70	M6	0.1

Versions

Sensor version	Nominal voltage	Output power	Max. length of signal cable
00	10–30 V	HTL 10–30 V	30m
01	10–30 V	TTL Line Driver	50m
11	5 V	TTL Line Driver	10m

To place an order, please add the sensor type to the part number. Order example: WKMEX-10-80-00

drylin® digital measuring systems

Digital drylin® measuring systems | Product range

Stop motion measuring system with rail scale

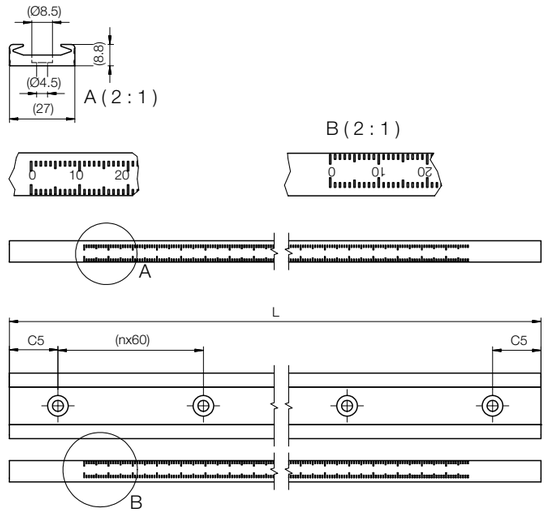
Order key

Type	Size

NKV - 27 - MES - 1000

drylin® pre-load prism slides	Installation size	Measuring system	Measuring length

- econ measuring system based on drylin® pre-load prism slide
- Carriages with individually adjustable pre-load in 4 different strengths
- Including scaling on the rail
- Cost-effective, durable, practical
- Guaranteed holding force from 1.3N to 11.7N
- Due to stop motion pre-loading, the measuring system is suitable for vertical installation without any further clamping



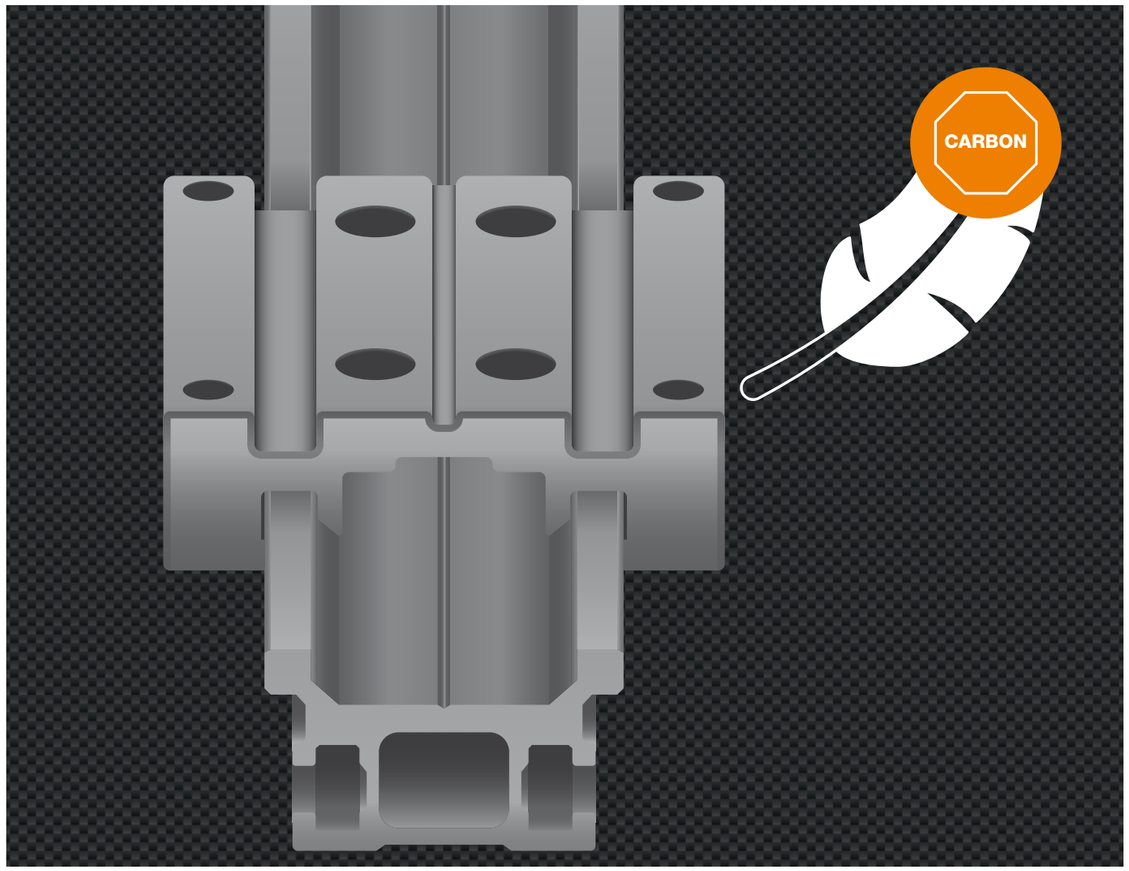
Dimensions [mm]

Part No.	A ±0.2	Al –0.1	H ±0.2	E1 ±0.15	E2 ±0.15	E3 ±0.15	l*
NKV-27-MES-1000	27	35/60	22	15	18	30	35/53/60/78
NKV-27-MES-2000	27	35/60	22	15	18	30	35/53/60/78

Part No.	hw ±0.25	lt ±0.2	lb	ts	tg	Average displacement force [N]	K1
NKV-27-MES-1000	22.5	20.5	5.5	3.5	M3	2–15	4.5
NKV-27-MES-2000	22.5	20.5	5.5	3.5	M3	2–15	4.5

drylin® stop motion full product range online
▶ www.igus.eu/drylinstopmotion

My sketches



drylin® linear technology – Carbon fibre

- Lightweight and robust
- Non-metallic
- Non-magnetic
- X-ray transparent
- Lubrication and maintenance-free

Extremely lightweight and 100% lubrication-free

Extremely lightweight: drylin® carbon fibre

Extremely lightweight and yet extremely strong – tribologically optimised drylin® linear systems made from plastic and carbon fibre combine these properties. Whether as guide or linear axis: All systems are 100% lubrication and maintenance-free.

- Extremely lightweight
- Wear-resistant
- Tough and reliable
- Non-metallic
- Non-magnetic
- X-ray transparent

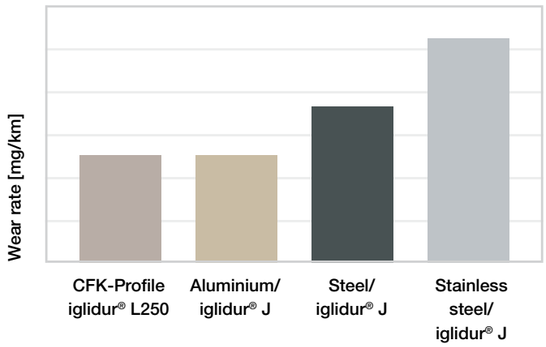
Typical application areas

- Aircraft interior
- Laboratory and medical technology
- Measuring technology

Available in 3 – 8 days
Detailed information about delivery time online.

Price breaks online
No minimum order value. No minimum order quantity.

Max. +60°C
Min. 0°C



Linear guides and modules made of solid plastic and carbon fibre

drylin® W linear guide made of carbon/solid plastic

- Extremely lightweight and strong carbon profile
- Tribologically optimised
- Solid plastic carriage made from iglidur® L250

▶ **Page 1202**

drylin® ZLW toothed belt axis with carbon profile

- Absolutely non-metallic
- Neoprene toothed belt drive with glass fibre reinforcement
- Max. stroke length 1,000mm

▶ **Page 1203**

drylin® SAW linear module made from carbon fibre

- drylin® W profile made of carbon fibre
- Drive: Trapezoidal or high-helix lead screw
- Lightest version with carbon, solid plastic, aluminium lead screw

▶ **Page 1204**

drylin® SHTP linear module with round carbon fibre shafts

- Very lightweight due to carbon fibre hollow shafts and solid plastic
- Ideal for multi-carriage solutions, also opposite
- Configurable with accessories for manual and electric adjustment

▶ **Page 1205**

drylin® CWM round shaft made from carbon fibre

- Very lightweight due to hollow shaft geometry
- Hollow rail for supply lines
- Surface UCU (unidirectional/cross-winding/unidirectional)

▶ **Page 1206**

drylin® W carbon fibre | Product range

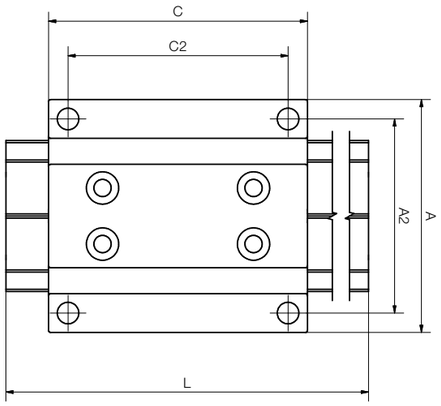
Linear guide system – extremely lightweight and strong

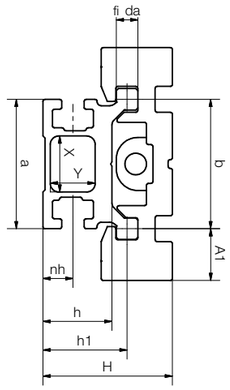
Order key

Complete solution

Type	Dimensions [mm]/Type
W K P C	-06-30-06

drylin® W	Complete system	Plastic	Carbon fibre	Shaft Ø	Rail width	Carriage length





Technical data – guide rail made from carbon

Part No.	F max. radial		Weight	Iy	Iz
	stat.	dyn.			
	[N]	[N]	[g/m]	[mm⁴]	[mm⁴]
WSPC-06-30	300	60	410	30,391	11,674

Dimensions [mm] – guide profile made from carbon

Part No.	a	b	da –0.1	h	h1	nh	X	Y	L
WSPC-06-30	30	30	5	16	19.5	7	13	10	3,000

Dimensions [mm] solid plastic guide carriage made from iglidur® polymer

Part No.	H	A1	A	A2	C	C2
WWPL-06-30-06	30	12	54	45	60	51

drylin® ZLW carbon fibre | Product range

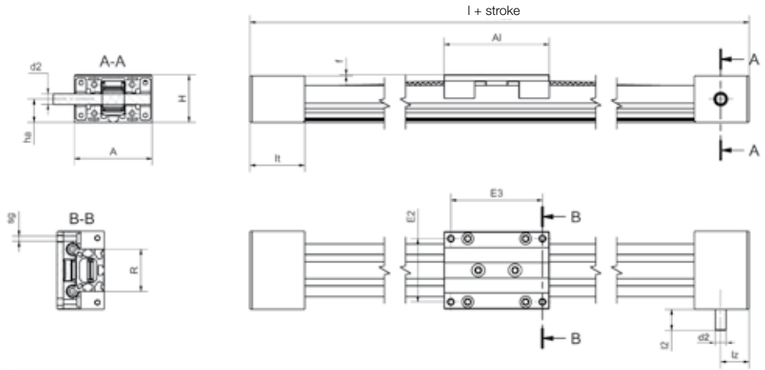
Toothed belt axis – non-metallic

- Guide profile made from carbon
- Linear carriage made from iglidur® polymer

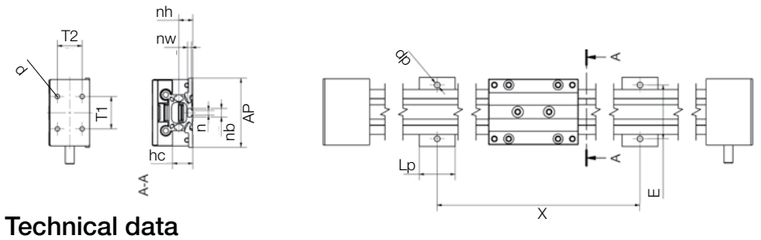
Order key

Type	Dimensions [mm]/Type
ZLW-06	30-P-1000

Toothed belt axis	Shaft Ø	Rail width	Plastic	Stroke length



Connection size



Technical data

Part No.	Weight without stroke [kg]	Weight 100mm stroke [kg]	Max. stroke length [mm]	Trans-mission [mm/rev]	Tooth profile	Drive belt -material	Drive belt -width [mm]	Drive belt -tension [N]
Basic 02 P	0.3	0.08	1,000	54	HTD 3M	Neoprene with GF	9	25

Dimensions [mm]

Part No.	A –0.3	Al	H	E2 ±0.15	E3 ±0.15	l	R ±0.15	f	lt –0.3	ha	lz	l2	d2 h9
ZLW-0630-P	54	60	31	45	51	144	30	3	42	14	20	20	8

Connection size

Part No.	X	E ±0.2	AP –1.0	Lp	dp	d	T1 ±0.25	T2 -0.3
ZLW-0630-P	variable	40	52	15	5.5	3	20	21

drylin® SAW carbon fibre | Product range

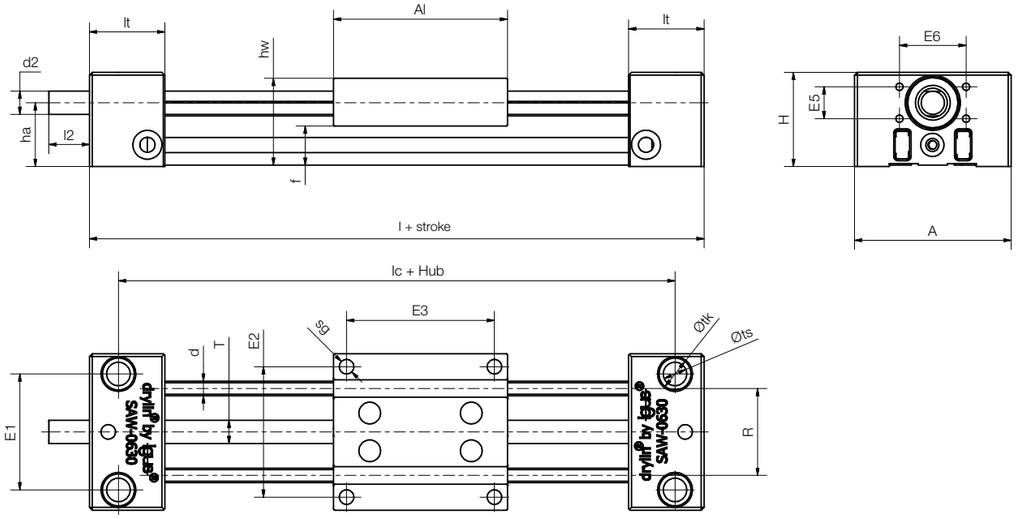
Linear module with high profile carbon fibre – lightweight and robust

- Guide profile made from carbon
- Linear carriage made from iglidur® polymer

Order key
Complete solution

Type	Dimensions [mm]/Type
SAW-06	30-P-1000

drylin® linear module | Shaft Ø | Rail width | Plastic | Stroke length



Technical data

Part No.	Stroke length	Weight		max. speed	Max. static load capacity	
		Standard	Additional			
	[mm]	[kg]	per 100mm [kg]	[1/min]	axial [N]	radial [N]
SAW-0630-P-...	300	0.25	0.07	1,000	50	50

Dimensions [mm]

Part No.	A	Al	H	E1	E2	E3	E5	E6	l	lc	hw	f	lt
	–0.3			±0.15	±0.15	±0.15							±0.1
SAW-0630-P-...	54	60	32.5	40	45	51	11	23	112	92	80	13.5	26

Part No.	tk	ts	sg	d	T	l2	d2	ha
					ø			
SAW-0630-P-...	11	6.6	5	□ 5	8	15	Tr8x1.5	22

drylin® SHTP carbon fibre | Product range

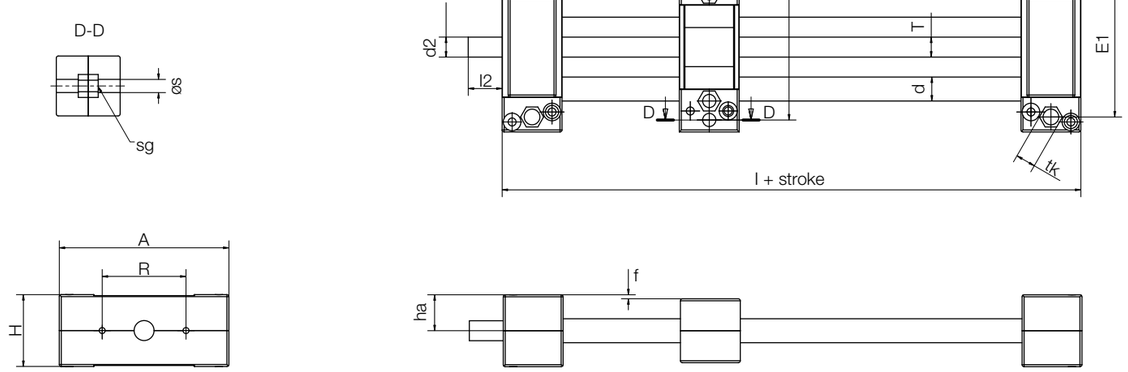
Linear module with carbon fibre hollow shafts – ideal for multi-carriage solutions

- Lead screws made from carbon
- Linear carriage made from iglidur® polymer

Order key
Complete solution

Type	Dimensions [mm]/Type
SHTP-01-12-CWM	

Linear module | Plastic | Design | Dimension | Carbon fibre shaft



Technical data

Part No.	Max. stroke length	Carbon fibre shaft		More information
		Weight	Additional [kg]	
	[mm]	[kg]	(per 100mm)	
SHTP-01-12-CWM	500	0.3	0.06	Drive nut and linear bearings made from iglidur® J
SHTP-02-12-CWM	500	0.3	0.06	Bearing and nut integrated into the carriage

Dimensions [mm]

Part No.	A	Al	H	E1	E2	l	R	f	lt	tk	ts
									±0.1		+0.15
SHTP-01-12-CWM	85	30	36	70	73	90	42	2	30	10	6.0
SHTP-02-12-CWM	85	30	36	70	73	90	42	2	30	10	6.0

Part No.	s	sg	d	T	l2	d2[99]	ha	Max. static load capacity	
								axial	radial
								[N]	[N]
SHTP-01-12-CWM	6.3	M6	12	Tr10x2	17	Tr10x2	18	100	100
SHTP-02-12-CWM	6.3	M6	12	Tr10x2	17	Tr10x2	18	100	100

[99] Lead screw end unmachined (standard)

drylin® carbon fibre | Product range

Carbon fibre hollow shaft

- Material: CFK composite
- Roundness tolerance: ± 0.05mm
- Diameter tolerance: –0.1mm
- Application temperature: max. +80°C

CARBON

Order key

Type	Dimensions [mm]

CWM-12-300

Carbon fibre shaft | Metric | Outer Ø | Shaft length

Dimensions [mm]

Part No.	Design	Diameter –0.1	Max. length	Weight [g]
CWM-12	Hollow shaft	12/9	2,000	70
CWM-16	Hollow shaft	16/12.5	2,000	120
CWM-20	Hollow shaft	20/16	2,000	170
CWM-30	Hollow shaft	30/26	2,000	270

drylin® linear technology – products made of stainless steel

- Temperature resistant up to +250°C
- Corrosion-free
- Chemical resistance
- Ready-to-install linear guides and modules
- Lubrication and maintenance-free

drylin® stainless steel | Advantages

Machine parts made of stainless steel are designed to survive in the worst environments. Heat, pressure, seawater, liquid and gaseous media like detergents and other chemicals. If these machine parts also have to work as a bearing, the combination with iglidur® high-performance polymers is ideal. All bearings are lubrication-free and the plastic parts are secured axially and radially in the housings with positive fit.

The suitable iglidur® material can be selected according to the application and used for linear and/or rotary movements.

- Lubrication-free
- Temperature resistant up to +250°C
- Corrosion-resistant
- Chemical resistance
- Cost-effective

The use of **AISI 316Ti** and **AISI 304** makes of the guides resistant to seawater and chemical contact corrosion, and the guide shafts are also made from AISI 316Ti. Despite the lack of surface hardness, required for instance by recirculating ball bearings, they are suitable for use with plain bearings. The large contact surface of a plain bearing diminishes the surface pressure to a mostly safe value.

Typical application areas

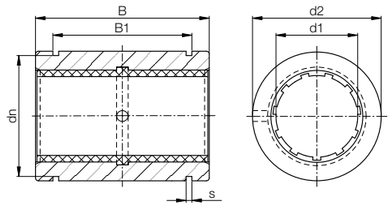
- Food and bottling industry
- Meat processing
- Harbour and crane facilities
- Yacht building
- Chemical industry
- Electroplating industry
- Medical- and rehabilitation technologies
- Packaging industry

Lubrication freedom with drylin® for a baking and conveyor unit

drylin® W guide rails are accredited to cleanroom-standards and therefore used in this blister machine

drylin® R linear plain bearings | Product range

Closed stainless steel adapter made of stainless steel 303



- Secured by circlips

Order key

Type					Size	Option
R	J	U	M-01-12	-ES		
Closed	iglidur® J	Liner	Metric	Standard	Inner Ø d1	Stainless steel

78) According to igus® testing method ▶ Page 1146
82) Design tips ▶ Page 1078
Please note: Installation instructions ▶ Page 1079

Technical data

Part No.	d1 tolerance[78)]	Fmax. dynamic[82)] P = 5MPa	Fmax. static[82)] P = 35MPa	Weight
	[mm]	[N]	[N]	[g]
RJUM-01-12-ES	+0.030 +0.088	960	6,720	60
RJUM-01-16-ES	+0.030 +0.088	1,440	10,080	84
RJUM-01-20-ES	+0.030 +0.091	2,250	15,750	147
RJUM-01-25-ES	+0.030 +0.091	3,625	25,375	324
RJUM-01-30-ES	+0.040 +0.110	5,100	35,700	486

Dimensions [mm]

d1	d2 h7	B h10	B1 H10	s H10	dn h10	Part No.
12	22	32	22.6	1.30	20.5	**RJUM-01-12-ES**
16	26	36	24.6	1.30	24.2	**RJUM-01-16-ES**
20	32	45	31.2	1.60	29.6	**RJUM-01-20-ES**
25	40	58	43.7	1.85	36.5	**RJUM-01-25-ES**
30	47	68	51.7	1.85	43.5	**RJUM-01-30-ES**

Available with drylin® liners (optional: J200/A180):

J

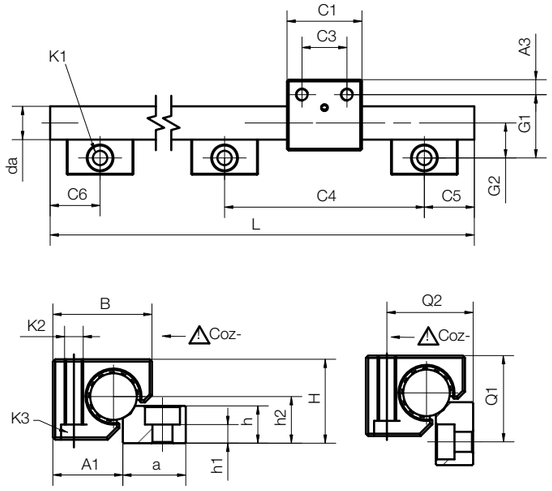
E7

X

drylin® W profile guides | Product range

Single rail, made of 316 stainless steel

STAIN-LESS STEEL



Housing and shaft support material
AISI 316
Shaft material
AISI 316Ti

Technical data and dimensions [mm]

Part No.	Weight	H[57]	da	L	a	h	h1	h2	G1	G2	A1	Q1	Q2
		±0.25	–0.1	Max.	–0.3								
	[kg/m]												
WS-10-ES-FG	0.87	18	10	3,000	27	5.5	5.5[58]	9	27	17	16.5	–	–
WS-16-ES-FG	2.22	27	16	3,000	27	12.0	4.5	14	33	19	25	32	28
WS-20-ES-FG	3.37	36	20	3,000	27	16.0	8.0	20	38	21	30	37	37
WS-25-ES-FG	5.21	45	25	3,000	32	20.0	9.0	25	46.5	25.5	37.5	45.5	46

Part No.	C1	C3	C4	C5	C5	C6	C6	A3	K1 for screw	Iy	Iz	Wby	Wbz
				Min.	Max.	Min.	Min.		DIN 912	[mm⁴]	[mm⁴]	[mm³]	[mm³]
WS-10-ES-FG	29	16	120	20	79.5	20	79.5	6.5	M6[58]	491	491	98	98
WS-16-ES-FG	36	18	120	20	79.5	20	79.5	9.0	M8	3,217	3,217	402	402
WS-20-ES-FG	45	27	120	20	79.5	20	79.5	9.0	M8	7,854	7,854	785	785
WS-25-ES-FG	58	36	150	25	99.5	25	99.5	11.0	M10	19,175	19,175	1,534	1,534

[57] Height dimension minus the bearing clearance tolerance [58] With plain holes

Can be combined with:


WJ200UM(T)-...


WJ200UME-...


WJUM-..-ES-FG


WJRM-...

Suitable liner material


iglidur® J


iglidur® E7


iglidur® A180

drylin® stainless steel

drylin® W profile guides | Product range

Pillow blocks, made from 316 stainless steel

Order key

Type	Design
W J	UM-01-10-ES-FG

drylin® W | iglidur® J liner | Pillow blocks, round | Standard | Size 10 | Stainless steel | Precision casting

Material
ES-FG: Stainless steel precision casting AISI 316

Technical data and dimensions [mm]

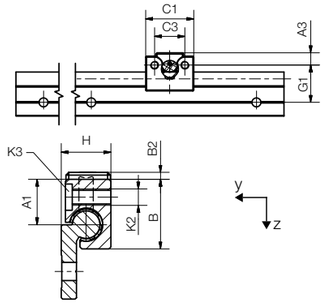
Part No.	Weight	B	C1	C3	A3	K2	K3	Stat. load capacity		
							Countersunk	Coy	Coz+	Coz-
	[g]						head screw	[N]	[N]	[N]
WJUM-01-10-ES-FG[59]	57	26	29	16	6.5	M6	M5	3,800	3,800	950
WJUM-01-16-ES-FG[59]	134	34.5	36	18	9	M8	M6	6,900	6,900	1,450
WJUM-01-20-ES-FG[59]	280	42.5	45	27	9	M8	M6	11,000	11,000	1,900
WJUM-01-25-ES-FG[59]	564	52.5	58	36	11	M10	M8	16,000	16,000	3,600

[59] Alternative with XUMO-01-... liners for high temperatures available. Part No.: WXUM-01-...

drylin® W profile guides | Product range

Hybrid roller bearings made of stainless steel

WJRM-01 with single roller



Order key

Type	Size	Material

WJRM-01-10 - ES

Hybrid roller bearing	Single roller bearing	Size 10	Stainless steel

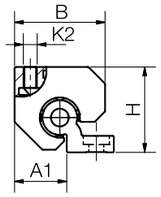
Material
ES: Stainless steel (AISI 316Ti)
ES-FG: Stainless steel precision casting AISI 316

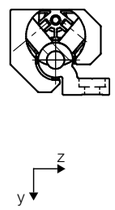
Technical data and dimensions [mm]

Part No.	Static load capacity Co	Dyn. load capacity Cz+ at total running distance [km]			F · v
		10	100	200	Max.
	[N]	[N]	[N]	[N]	[N · m/s]
WJRM-01-10-ES-FG	250	250	90	50	50

Part No.	Coefficient of friction in z-direction	Coefficient of friction in y-direction	Weight	A1	A3	B	B2	C1	C3	G1	H	K2	K3 for screw
	[µ]	[µ]	[g]										
WJRM-01-10-ES-FG	< 0.1	–	57	16.5	6.5	26	2.5	35	22	27	18	M6	M5

WJRM-21 with double roller





Order key

Type	Size	Material

WJRM-21-20 - ES

Hybrid roller bearing	Double roller bearing	Size 20	Stainless steel

Material
ES: Stainless steel (AISI 316Ti)
ES-FG: Stainless steel precision casting AISI 316

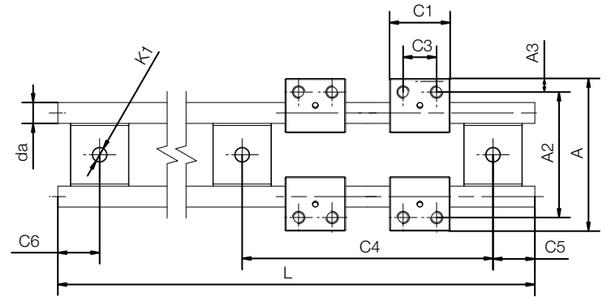
Technical data and dimensions [mm]

Part No.	Static load capacity Co	Dyn. load capacity Cy+ at total running distance [km]			F · v
		10	100	200	Max.
	[N]	[N]	[N]	[N]	[N · m/s]
WJRM-21-20-ES-FG	840	840	300	150	80

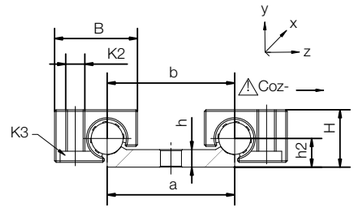
Part No.	Coefficient of friction in z-direction	Coefficient of friction in y-direction	Weight	A1	A3	B	B2	C1	C3	G1	H	K2	K3 for screw
	[µ]	[µ]	[g]										
WJRM-21-20-ES-FG	–	< 0.1	504	30	9	52	–	52	34	38	49	M8	M5

drylin® W hybrid roller bearings | Product range

Double rail



Installation size 10–20
Housing and shaft support material — AISI 316
Shaft material — AISI 316Ti
Installation size 25
Shaft, shaft support and housing material — AISI 316Ti



Technical data and dimensions [mm]

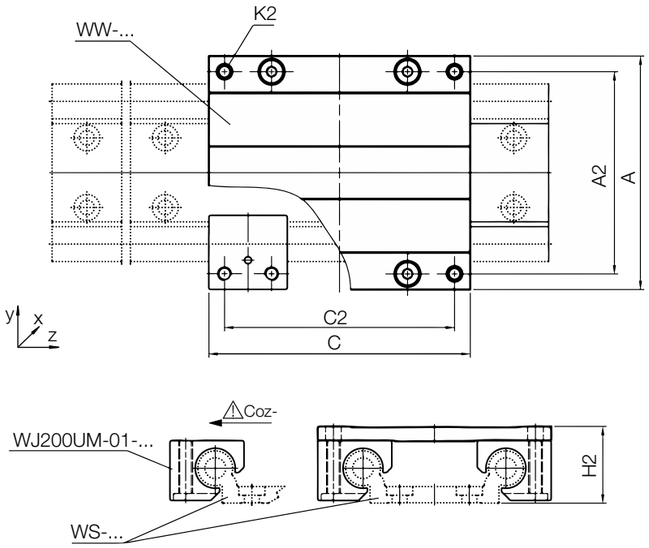
Part No.	Weight	H[57]	da	L	a	b	h	h2	A	A2
	[kg/m]	±0.25	h9	Max.	–0.3					
WS-10-40-ES-FG	1.58	18	10	3,000	40	40	5.5	9	73	60

Part No.	C4	C5 Min.	C5 Max.	C6 Min.	C6 Max.	K1 for screw DIN 912
WS-10-40-ES-FG	120	20	79.5	20	79.5	M6

[57] Height dimension minus the bearing clearance tolerance

drylin® W profile guides | Product range

Assembled stainless steel guide carriages, round



Technical data and dimensions [mm]

Part No.[64]	Weight	A	C	A2	C2	K2	H2[57]	Static load capacity				
		Width	Length				±0.25	Coy	Coz	Mox	Moy	Moz
	[kg]							[N]	[N]	[Nm]	[Nm]	[Nm]
WW-10-40-10-J200-GESG-PES	0.29	73	100	60	87	M6	24	4,800	2,400	96	170	170
WW-10-40-15-J200-GESG-PES	0.34	73	150	60	137	M6	24	4,800	2,400	96	290	290
WW-10-40-20-J200-GESG-PES	0.40	73	200	60	187	M6	24	4,800	2,400	96	410	410

[57] Height dimension minus the bearing clearance tolerance [64] Optional with manual clamp, suffix "-HKA"

My sketches

drylin® shafts | Product range

Stainless steel shafts

EWM EEWM EWMR

STAIN-LESS STEEL

igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Please contact us!
drylin® shafts can be individually machined.
Please send us your drawing or configure online.
We can then provide a quotation quickly.
▶ **www.igus.eu/shaft-configurator**

- Completely supported and mounted with standard aluminium support
- For supported shafts:
  - ▶ Shaft support supplied in lengths of 600mm max.
  - ▶ Standard pitch T2, T1 also possible upon request
  - ▶ Symmetrical hole pitches C5 = C6

Dimensions [mm] – hardened stainless steel AISI 440B

Part No.	d	Weight [kg/m]	Max. length	Effective hardness depth
EWM-06	06	0.222	3,000	0.8
EWM-08	08	0.359	4,000	0.9
EWM-10	10	0.617	4,000	0.9
EWM-12	12	0.888	6,000	1.0
EWM-16	16	1.578	6,000	1.2
EWM-20	20	2.466	6,000	1.6
EWM-25	25	3.853	6,000	1.8
EWM-30	30	5.549	6,000	2.0
EWM-40	40	9.865	6,000	2.2
EWM-50	50	15.413	6,000	2.4

drylin® stainless steel

drylin® shafts | Product range

Materials: AISI 440B, AISI 420C, AISI 304, AISI 316Ti

Order key

Type	Size	Options
E W M	- 06	- ☐
Steel shaft	Metric	Outer Ø	Shaft length [mm]

Available shaft materials
AISI 440B, hardened/ground ▶ EWM
AISI 420C, hardened/ground ▶ EEWM
AISI 304, ground ▶ EWMR
AISI 316Ti, ground ▶ EWMS

Dimensions [mm] – hardened stainless steel AISI 420C

Part No.	d	Weight [kg/m]	Max. length	Effective hardness depth
EEWM-06	06	0.222	3,000	0.8
EEWM-08	08	0.359	4,000	0.9
EEWM-10	10	0.617	4,000	0.9
EEWM-12	12	0.888	6,000	1.0
EEWM-16	16	1.578	6,000	1.2
EEWM-20	20	2.466	6,000	1.6
EEWM-25	25	3.853	6,000	1.8
EEWM-30	30	5.549	6,000	2.0
EEWM-40	40	9.865	6,000	2.2
EEWM-50	50	15.413	6,000	2.4

Dimensions [mm] – stainless steel AISI 304 (EWMR) or AISI 316Ti soft stainless steel (EWMS)

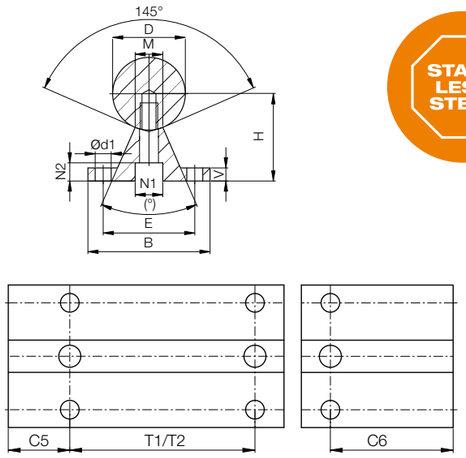
Part No.	d	Weight [kg/m]	Max. length
EWMR-10	10	0.617	4,000
EWMS-10	10	0.617	3,000
EWMR-12	12	0.888	6,000
EWMR-16	16	1.578	6,000
EWMR-20	20	2.466	3,000
EWMS-20	20	2.466	3,000
EWMR-25	25	3.853	6,000
EWMR-30	30	5.549	6,000

Order example:
EWM-16-500: Steel shaft 16mm Ø made of AISI 440B, 500mm in length

drylin® shafts | Product range

Supported stainless steel shafts

EWUM



STAIN-LESS STEEL

igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Shaft support blocks for Ø 20mm
made of stainless steel VA

- Connecting sizes as standard supports made from aluminium

Dimensions [mm] – supported stainless steel shafts AISI 440B

Part No.	D	B	H	V	N1	N2	d1	M	(°)	E	T1[87]	C5/C6		T2	C5/C6		Weight
												Min.	Max.		Min.	Max.	
			±0.02								±0.15	for T1		Standard	for T2 Standard		[kg/m]
EWUM-12	12	40	22	5	8.0	5.0	4.5	5.8	50	29	75	20	57	120	20	79	1.75
EWUM-16	16	45	26	5	9.5	6.0	5.5	7.0	50	33	100	20	69	150	20	94	2.64
EWUM-20	20	52	32	6	11.0	6.5	6.6	8.3	50	37	100	20	69	150	20	94	3.97
EWUM-25	25	57	36	6	14.0	8.5	6.6	10.8	50	42	120	20	79	200	20	119	5.65
EWUM-30	30	69	42	7	17.0	10.5	9.0	11.0	50	51	150	20	94	200	20	119	7.93
EWUM-40	40	73	50	8	17.0	10.5	9.0	15.0	50	55	200	20	119	300	20	169	12.88
EWUM-50	50	84	60	9	19.0	12.5	11.0	19.0	46	63	200	20	119	300	20	169	19.60

[87] **T1 pitch upon request; standard is T2**

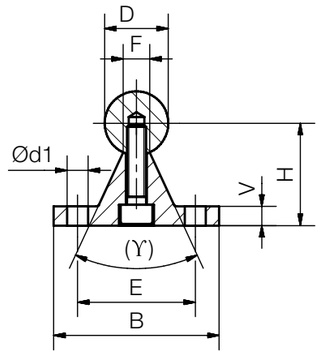
Order example:
EWUM-16-500-T1: Low level supported stainless steel shaft (AISI 440B), 16mm outer Ø, 500mm in length, pitch T1

My sketches

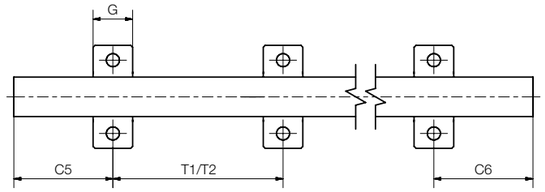
drylin® shafts | Product range

Partially supported stainless steel shafts

EWUM-ES/
EWUMS-ES



igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life



Shaft support blocks for Ø 20mm
made of stainless steel VA

- Connecting sizes as standard supports made from aluminium

STAIN-LESS STEEL

Order key

Type	Size	Options
E W U M S - ES - 20 -		- T1

- E W U M: Partially supported stainless steel shaft, metric
- S: Material
- ES: Material
- 20: Outer Ø
- Options: Shaft length [mm]
- T1: Hole pattern

Available materials and lengths:
AISI 440B, max. 6,000mm
▶ EWUM
AISI 316Ti, max. 3,000mm
▶ EWUMS

Options
Blank: AISI 440B material
S: AISI 316Ti
Hole pattern
T2: T2 pitch (standard)
T1: T1 pitch

Dimensions [mm] – partially supported stainless steel shafts AISI 440B

Part No.	D	B	H	V	d1	E	ϒ	F	G	T1	C5/C6 for T1		T2	C5/C6 for T2	
	h6		±0.02										Standard		
											Min.	Max.		Min.	Max.
EWUM-ES-12	12	40	22	5	4.5	29	–	5.8	14	75	20	57	120	20	79
EWUM-ES-16	16	45	26	5	5.5	33	–	7.0	16	100	20	69	150	20	94
EWUM-ES-20	20	52	32	6	6.6	37	50°	8.3	20	100	20	69	150	20	94
EWUM-ES-25	25	57	36	6	6.6	42	–	10.8	25	150	20	79	200	20	119
EWUM-ES-30	30	69	42	7	9.0	51	–	11.0	25	150	20	94	200	20	119
EWUM-ES-40	40	73	50	8	9.0	55	–	15.0	25	200	20	119	300	20	169

T2 pitch as standard, T1 upon request

Order example:
EWUM-ES-20-500: Partially supported stainless steel shaft. AISI 440B material, T2 pitch (standard), 20mm outer Ø, 500mm length

Dimensions [mm] – partially supported stainless steel shafts AISI 316Ti

Part No.	D	B	H	V	d1	E	ϒ	F	G	T1	C5/C6 for T1		T2	C5/C6 for T2	
	h6		±0.02										Standard		
											Min.	Max.		Min.	Max.
EWUMS-ES-12	12	40	22	5	4.5	29	–	5.8	14	75	20	57	120	20	79
EWUMS-ES-16	16	45	26	5	5.5	33	–	7.0	16	100	20	69	150	20	94
EWUMS-ES-20	20	52	32	6	6.6	37	50°	8.3	20	100	20	69	150	20	94
EWUMS-ES-25	25	57	36	6	6.6	42	–	10.8	25	150	20	79	200	20	119
EWUMS-ES-30	30	69	42	7	9.0	51	–	11.0	25	150	20	94	200	20	119
EWUMS-ES-40	40	73	50	8	9.0	55	–	15.0	25	200	20	119	300	20	169

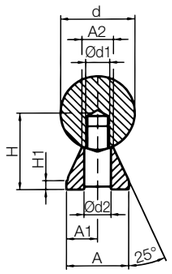
T2 pitch as standard, T1 upon request

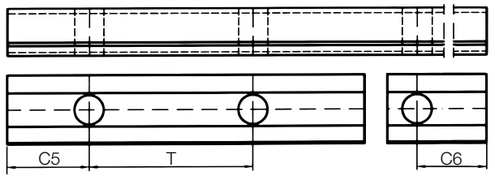
Order example:
EWUMS-ES-20-500-T1: Partially supported stainless steel shaft. AISI 316Ti material, T1 pitch, outer Ø 20mm, length 500mm

drylin® shafts | Product range

Low level supported stainless steel shafts

EWUMN





Order key

Type	Size	Options
E W U M N - 20 - ☐		- T1
Low level supported stainless steel shaft, metric	Outer Ø	Shaft length [mm]	Hole pattern

EWUM: Supported stainless steel shaft
EWUMN: Low level supported stainless steel shaft

Available materials and lengths:
AISI 440B, max. 6,000mm

Hole pattern
T2: T2 pitch (standard)
T1: T1 pitch (upon request)

Dimensions [mm] – low level supported stainless steel shaft AISI 440B

Part No.	d	H ±0.02	H1	A	A1	A2 ±0.02	d1	d2	T	C5/C6 Min.	C5/C6 Max.	Weight [kg/m]
EWUMN-12	12	14.5	3	11	5.5	5.4	M4	4.5	75	20	57	1.62
EWUMN-16	16	18	3	14	7.0	7.0	M5	5.5	75	20	57	2.54
EWUMN-20	20	22	3	17	8.5	8.1	M6	6.6	75	20	57	3.81
EWUMN-25	25	26	3	21	10.5	10.3	M8	9.0	75	20	57	5.62
EWUMN-30	30	30	3	23	11.5	11.0	M10	11.0	100	20	69.5	7.63
EWUMN-40	40	39	4	30	15.0	15.0	M12	13.5	100	20	69.5	13.47
EWUMN-50	50	46	5	35	17.5	19.0	M14	15.5	100	20	69.5	20.31

Low level supported shafts are delivered unmounted.

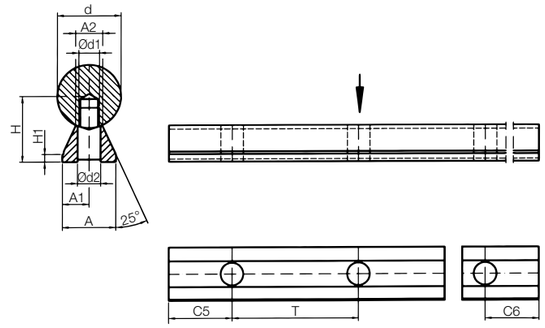
Order example:
EWUMN-16-500: Low level supported stainless steel shaft (AISI 440B), 16mm outer Ø, 500mm length

My sketches

drylin® shafts | Product range

Low level partially supported stainless steel shafts

EWUMN-ES/
EWUMSN-ES



igus® recommendation: Linear plain bearings equipped with iglidur® E7 liners for 8 times longer service life

Low level shaft support blocks made of stainless steel

- Connection sizes are identical to low-level aluminium supports ▶ **Page 1161**

Dimensions [mm] – low level partially supported stainless steel shafts AISI 440B

Part No.	d	H	H1	A	A1	A2	d1	d2	T	C5/C6		Weight
		±0.02								Min.	Max.	[kg/m]
EWUMN-ES-12	12	14.5	3	11	5.5	5.4	M4	4.2	75	20	57.0	1.00
EWUMN-ES-16	16	18.0	3	14	7.0	7.0	M5	5.2	75	20	57.0	1.76
EWUMN-ES-20	20	22.0	3	17	8.5	8.1	M6	6.2	75	20	57.0	2.77
EWUMN-ES-25	25	26.0	3	21	10.5	10.3	M8	8.2	75	20	57.0	4.35
EWUMN-ES-30	30	30.0	3	23	11.5	11.0	M10	10.2	100	20	69.5	6.01
EWUMN-ES-40	40	39.0	4	30	15.0	15.0	M12	12.5	100	20	69.5	10.80

Low-level partially supported stainless steel shafts are supplied unassembled

Order example:
EWUMN-ES-20-500: Partially supported stainless steel shaft. AISI 440B material, T2 pitch (standard), 20mm outer Ø, 500mm length

drylin® shafts | Product range

drylin® stainless steel

STAIN-LESS STEEL

Order key

Type	Size	Options

EWUMSN - ES - 20 - ☐ - T1

- Stainless steel shaft with low level support, metric
- Stainless steel partial support
- Outer Ø
- Shaft length [mm]
- Hole pattern

Available materials and lengths:
AISI 440B, max. 6,000mm
▶ EWUMN
AISI 316Ti, max. 3,000mm
▶ EWUMSN

Dimensions [mm] – low level partially supported stainless steel shafts AISI 316Ti

Part No.	d	H	H1	A	A1	A2	d1	d2	T	C5/C6		Weight
		±0.02								Min.	Max.	[kg/m]
EWUMSN-ES-12	12	14.5	3	11	5.5	5.4	M4	4.2	75	20	57.0	1.00
EWUMSN-ES-16	16	18.0	3	14	7.0	7.0	M5	5.2	75	20	57.0	1.76
EWUMSN-ES-20	20	22.0	3	17	8.5	8.1	M6	6.2	75	20	57.0	2.77
EWUMSN-ES-25	25	26.0	3	21	10.5	10.3	M8	8.2	75	20	57.0	4.35
EWUMSN-ES-30	30	30.0	3	23	11.5	11.0	M10	10.2	100	20	69.5	6.01
EWUMSN-ES-40	40	39.0	4	30	15.0	15.0	M12	12.5	100	20	69.5	10.80

Low-level partially supported stainless steel shafts are supplied unassembled

Order example:
EWUMSN-ES-20-500-T1: Partially supported stainless steel shaft. AISI 316Ti material, T1 pitch, 20mm outer Ø, 500mm length

drylin® SHT linear modules | Product range

Stainless steel linear modules

- Corrosion-resistant carriages and shaft end supports made of stainless steel
- High grade stainless steel shafts (AISI 440B)
- Stainless steel lead screw
- Temperature-resistant
- Up to +180°C with iglidur® X
- Food compliant with iglidur® A180
- Can be configured online as SHTC compact version

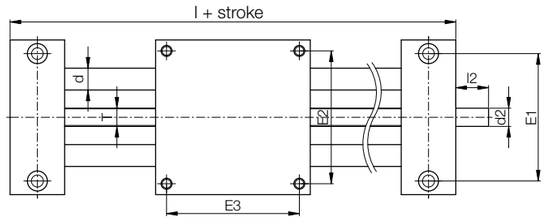
reddot design award winner 2006

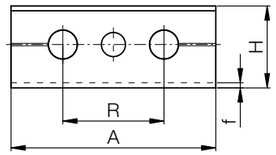
Order key

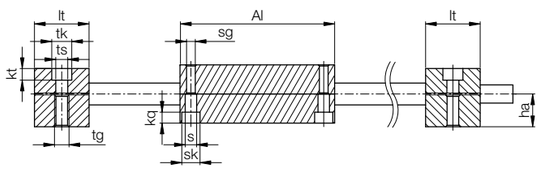
Type	Size	Options

S H T - ES J - 08

Standard	Stainless steel	Bearing material	Shaft material







Technical data

Part No.	Max. stroke length	Aluminium shaft		Steel shaft		Max. static load capacity	
		Weight	Additional (per 100mm)	Weight	Additional (per 100mm)	axial	radial
	[mm]	[kg]	[kg]	[kg]	[kg]	[N]	[N]
SHT-ESJ-08	300	0.24	0.05	0.27	0.1	100	360
SHT-ESJ-12	750	1.1	0.1	1.3	0.2	700	2,800
SHT-ESJ-20	1,000	3.2	0.3	3.9	0.6	1,600	6,400
SHT-ESJ-30	1,250	8.6	0.6	10.9	1.4	2,500	10,000

Dimensions [mm]

Part No.	A –0.3	Al –0.3	H	E1 ±0.15	E2 ±0.15	E3 ±0.15	l	R	f	lt	tk	ts
SHT-ESJ-08	65	65	23	52	55	55	96	32	1.5	15.5	10	5.5
SHT-ESJ-12	85	85	34	70	73	73	145	42	2	30	11	6.6
SHT-ESJ-20	130	130	48	108	115	115	202	72	2	36	15	9.0
SHT-ESJ-30	180	180	68	150	158	158	280	96	4	50	20	13.5

Part No.	tg	kt ±0.1	s	sk	sg	kq	d	T	l2	d2 Standard	ha
SHT-ESJ-08	M6	7	4.2	8	M5	4.6	8	Tr6x2	17	Tr6x2	13
SHT-ESJ-12	M8	6.4	6.3	10	M6	6.0	12	Tr10x2	17	Tr10x2[92)]	18
SHT-ESJ-20	M10	8.6	6.4	11	M8	7.0	20	Tr18x4	26	12h9	23
SHT-ESJ-30	M16	12.6	11.0	18	M12	10.6	30	Tr24x5	38	14h9	36

[92)] Lead screw end unmachined

drylin® SHT linear modules | Product range

Hygienic design

STAIN-LESS STEEL

- Easily cleaned solution
- Wide gaps
- Materials: plastic and stainless steel
- Lead screw nuts made of FDA-compliant iglidur® A180
- Available accessories ▶ Page 1503

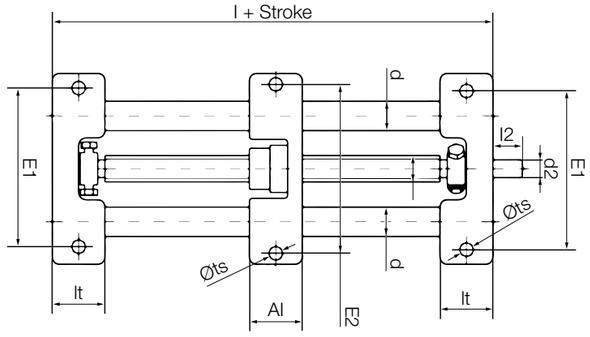
Order key

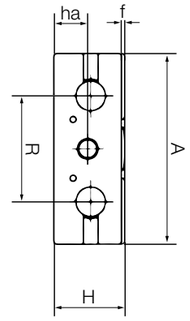
complete solution ▶ Page 1306

Type	Size	Shaft	Option

SHTC - 20 - EWM - HYD

Flexible	Installation size	Shaft material	Hygienic design





FDA The lead screw linear unit can be delivered with complete FDA-compliant Materials.

Dimensions [mm]

Part No.	A –0.3	Al –0.3	H	E1 ±0.15	E2 ±0.15	l	R	f	lt	ts	d	T	l2	d2	ha
SHTC-20-EWM-HYD	130	36	48	108	115	108	72	2	36	9.0	20	Tr18x4	26	12 h9	23

drylin® SLW linear modules | Product range

Made of stainless steel

- Stainless steel version with corrosion-resistant steel components (AISI 303, AISI 316 and AISI 316Ti)
- Choice of bearing material:
  iglidur® J = Standard
  iglidur® A180 = FDA-compliant
  iglidur® X = High temperature up to +150°C[117)]
- Available accessories
  ▶ Page 1503

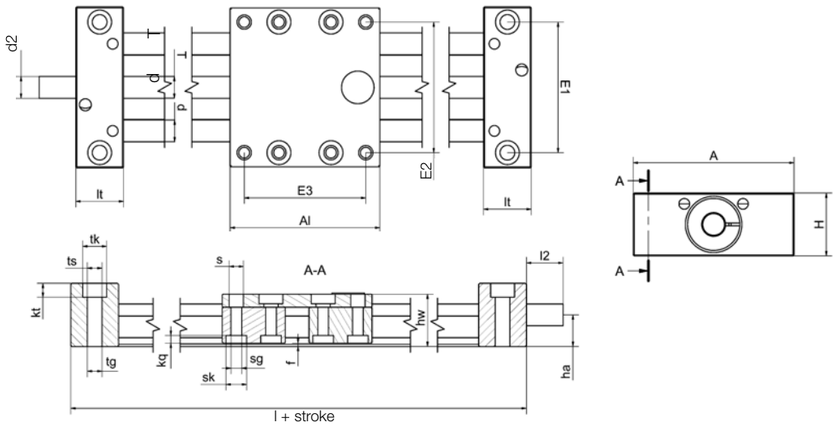
Order key
complete solution ▶ Page 1306

Type	Size

SLW - ESJ - 1040

Compact	Stainless steel	iglidur® J bearing	Installation size

STAIN-LESS STEEL



Technical data

Part No.	Shaft Ø	Max. stroke length	Weight	Additional (per 100mm)	Max. stat. load capacity	
	[mm]	[mm]	[kg]	[kg]	axial [N]	radial [N]
SLW-ESJ-1040	10	750	1.4	0.2	700	2,800
SLW-ESX-1040	10	750	1.4	0.2	700	2,800
SLW-ESA180-1040	10	750	1.4	0.2	700	2,800
SLW-ESJ-2080	20	1,000	5.7	0.64	1,600	6,400
SLW-ESA180-2080	20	1,000	5.7	0.64	1,600	6,400

Dimensions [mm]

Part No.	A –0.3	Al –0.3	H	E1 ±0.15	E2 ±0.15	E3 ±0.15	l	hw	f	lt	tk	ts	tg
SLW-ES-1040	74	100	29	60	60	87	144	24	1.5	22	11	6.8	M8
SLW-ES-2080	134	150	46	116	116	132	206	44	1.5	28	15	8.6	M10

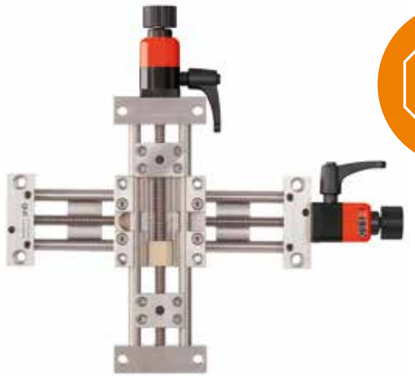
Part No.	kt ±0.1	s	sk	sg	kq	d	T	l2	d2 Standard	ha
SLW-ES-1040	6.4	6.6	9.5	M6	4.4	10	Tr10x2	17	Tr10x2[92)]	14.5
SLW-ES-2080	8.6	9.0	14	M8	5.5	20	Tr18x4	26	12h9	23.0

92) Lead screw end unmachined

117) In the event of severe temperature fluctuations during transport, storage and use, thermal expansion effects cannot be ruled out

drylin® SLW XY tables | Product range

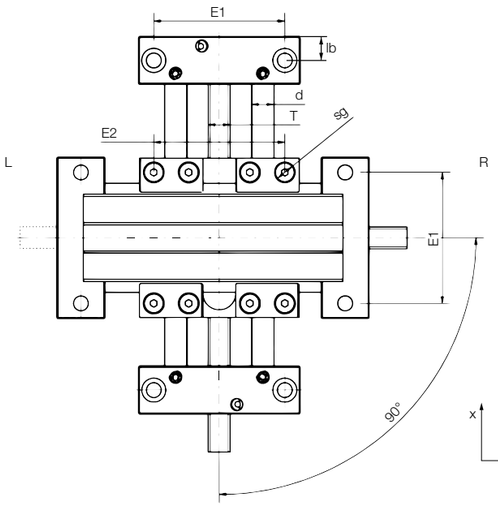
XY tables – stainless steel version

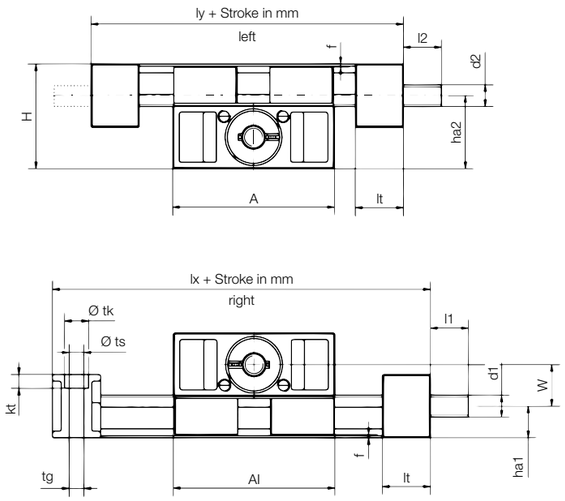


STAIN-LESS STEEL

Order key
▶ Page 1318

- For manual adjustments
- High torsional stability
- Structure entirely made from 316 stainless steel materials
- Chemical and corrosion-resistant
- Available accessories ▶ Page 1503





Dimensions [mm]

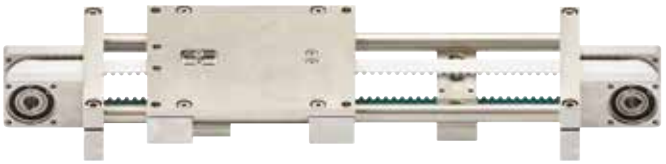
Part No.	Max. stroke length	A –0.3	Al	H	E1 ±0.15	E2 ±0.15	Base length lx	Base length ly	f	lt	tk ±0.1	ts	tg	kt
	[mm]													
SLW-XY-ESJ-1040	300	74	73	48	60	60	117	117	1.5	22	11	6.8	M8	6.4

Part No.	sg	d	T	l1	d1 Standard	d1 Alternative	l2	d2 Standard	d2 Alternative	ha1	ha2	W ha2–ha1
SLW-XY-ESJ-1040	M6	10	Tr10x2	17	Tr10x2	6 h9	17	Tr10x2	6 h9	14.5	33.5	19

The hand-wheel can be ordered left- or right-mounted in the y-direction.
Left: SLW-XY-ESJ-1040-L-200-300 for 200mm stroke length on the x-axis and 300mm on the y-axis
Right: SLW-XY-ESJ-1040-R-200-300 for 200mm stroke length on the x-axis and 300mm on the y-axis

drylin® ZLW linear modules | Product range

Stainless steel toothed belt modular drive system



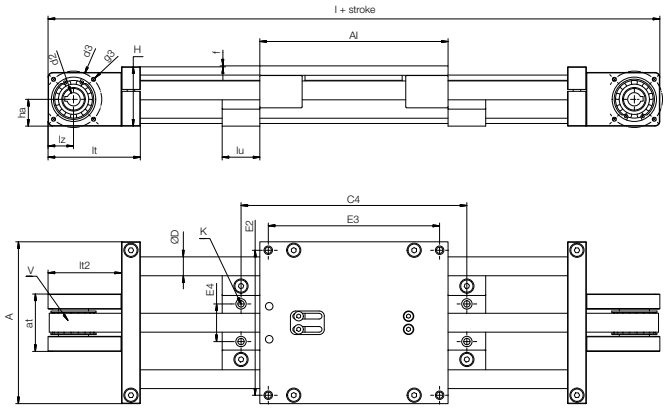
- High speed possible with ball bearings in end support
- Robust wide round belt
- Central belt adjustment on the carriage
- Based on lubrication-free drylin® W linear guide
- Variable motor connection due to solid and hollow shafts

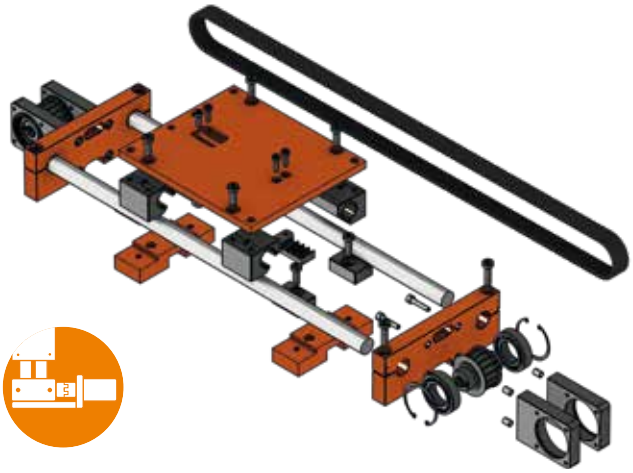
Order key

Type	Size	Options

ZLW-20120-ES-02-S-200-H-2000

Toothed belt axis	Installation size	Axis distance	Design	Version	Version	Carriage length	Drive pin	Stroke length





Technical data

Part No.	Max. stroke length [mm]	Transmission [mm/U]	Tooth profile	Drive belt -material	Drive belt -tension [N]
ZLW-20120-ES	2,500	144	8M	PU with steel cable	750
ZLW-20160-ES	2,500	144	8M	PU with steel cable	750
ZLW-20200-ES	2,500	144	8M	PU with steel cable	750

Dimensions [mm]

Part No.	A	Al	H	E2	E3	E4	C4	f	lt	ha	lz	l	d2 h7	d3	g3	D	K For DIN912 – M6	at	lt2	lu	V [mm/rev]
ZLW-20120-ES	172	200	63	154	182	40	240	–	98	28.5	27	396	14	60	M5	20	M8	61	78	40	144
ZLW-20160-ES	212	200	63	194	182	80	240	–	98	28.5	27	396	14	60	M5	20	M8	61	78	40	144
ZLW-20200-ES	252	200	63	234	182	120	240	–	98	28.5	27	396	14	60	M5	20	M8	61	78	40	144