

# DryLin<sup>®</sup> W - Harnessed DryLin<sup>®</sup> Systems

- Flexible and efficient use of space
- Low friction in dry operation
- Hard anodized aluminum rail
- Quiet operation
- Resistant to dust and dirt

Also available as  
pre-assembled driven systems



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# DryLin® W Selection Guide



Online Lifetime Calculation  
www.igus.com



Adjustable clearance available



## Features

Round vs. Square

DryLin® W “Single Rail Systems” are available in both round and square configurations.

For most applications the square version of the DryLin® W system is suitable — its ability to float in parallel systems optimizes bearing lifetime, reduces friction-forces, and saves on assembly time of the system.

The round version is ideal for dirty environments since debris is easily wiped from the system.

- Small size for design constraints
- Flexible
- J200 liner for reduced friction
- Great for manual and motor driven applications
- Square design for optimal floating option

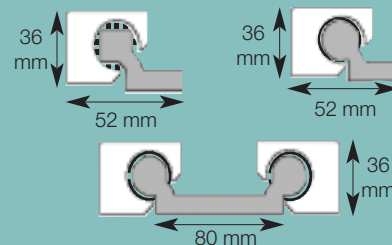
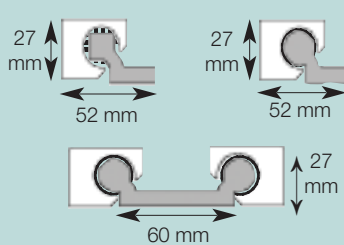
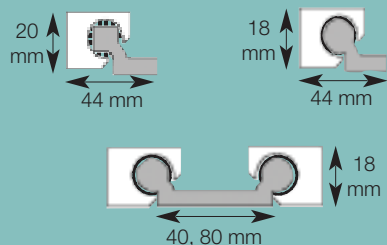
## Properties

Maximum Load (Depends on Orientation)	94 lbs
Maximum Speed	49 fps (15 m/s)
Maximum Rail Length	9.84 ft
Carriage Weight	.04 lbs (16 g)
Rail Weight	.15 lbs/ft (.23 kg/m)
Rail Material	Hard Anodized Aluminum
Carriage Material	Chromated Zinc / iglide® J200
Temperature Range	-40 to 194°F (-40°C to +90°C)
Carriage Clamp	Not Available

## DryLin® W10

## DryLin® W16

## DryLin® W20

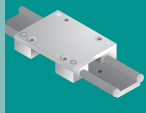


- Available in the most configurations
- Round standard with iglide® J material
- Square standard with iglide® J200 material
- Use square style as floating bearings
- Round style is excellent in aggressive environments

- All use the enhanced iglide® J200 liner
- Available square rail for optimal floating feature
- Also available in round profile
- Durable size

- Robust size
- All use the iglide® J200 liner for reduced friction and wear
- Available in both round and square profiles

DryLin® W10		DryLin® W16		DryLin® W20	
Single Carriage 270 lbs	Mounted System 1079 lbs	Single Carriage 462 lbs	Mounted System 1848 lbs	Single Carriage 719 lbs	Mounted System 2876 lbs
49 fps (15 m/s)		49 fps (15 m/s)		49 fps (15 m/s)	
12 ft (4m available upon request)		12 ft (4m available upon request)		12 ft (4m available upon request)	
.09 lbs (41 g)		.22 lbs (190 g)		.42 lbs (190 g)	
.42 to 1 lbs/ft (.62 to 1.5 kg/m)		.66 to 1.32 lbs/ft (.98 to 1.96 kg/m)		.89 to 2.21 lbs/ft (1.32 to 3.3 kg/m)	
Hard Anodized Aluminum 316 Stainless		Hard Anodized Aluminum		Hard Anodized Aluminum 316 Stainless	
Chromated Zinc / iglide® J / J200 Anodized aluminum and 316 stainless steel optional		Chromated Zinc / iglide® J200 Anodized aluminum optional		Chromated Zinc / iglide® J200 Anodized aluminum and 316 stainless steel optional	
-40 to 194°F (-40°C to +90°C) -148°F to 482°F (stainless)		-40 to 194°F (-40°C to +90°C)		-40 to 194°F (-40°C to +90°C) -148°F to 482°F (stainless)	
Available		Not Available		Available	

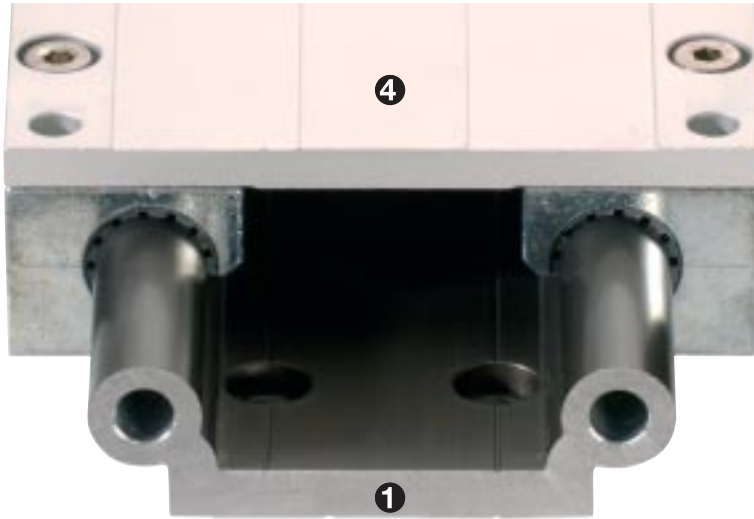


# DryLin® W Linear Guide System

DryLin® W was developed to promote both design flexibility and quick assembly in both single and double rail configurations. DryLin® W is also available in several mounted assemblies eliminating the need for both shaft alignment and bearing assembly. All DryLin® W systems are available with our enhanced J200 liners, which reduce friction and optimize bearing life.

### Technical Data

<b>Sliding elements:</b>
Maintenance-free
iglide® J / J200
iglide® T500 (SS only)
<b>Max. surface speed:</b>
49 f/s (15 m/s)
<b>Temperature range:</b>
-40°F to +194°F
(-40°C to +90°C)
<b>Rail:</b>
Hard anodized aluminum
Optional 316 stainless
<b>Carriages:</b>
Chromated Zinc
Anodized aluminum
Optional 316 Stainless



### DryLin® W - The original flexible guiding systems

DryLin® W uses J200 liners similar to DryLin® R but is also offered as cost-effective, harnessed systems. The design of DryLin® W promotes flexibility of design, and ease of assembly, with both single and double rail configurations:

- The single rail system, which may incorporate a floating square bearing, efficiently compensates for extreme shaft misalignments.
- The double rail system eliminates altogether the need for shaft alignment, offering a single bolt-on solution.

Hard anodized aluminum is used as the rail material, therefore DryLin® W also offers low wear, low friction without lubrication, resistance to dirt and dust, low weight and quiet operation.



### Also available as pre-assembled driven systems



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Turn-To-Fit carriages allow you to adjust the clearance for your application

DryLin® W  
Linear Guide System

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DryLin® W used for a stop dog in the glass industry



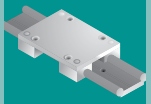
DryLin® W in permanent use in a conveyor belt



DryLin® W for guiding the iglus EnergyChain® in an inkjet printer

Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)

# DryLin® W Linear Guide System - Carriage



DryLin® W - Sliding elements  
 iglide® J and iglide® J200



iglide® J

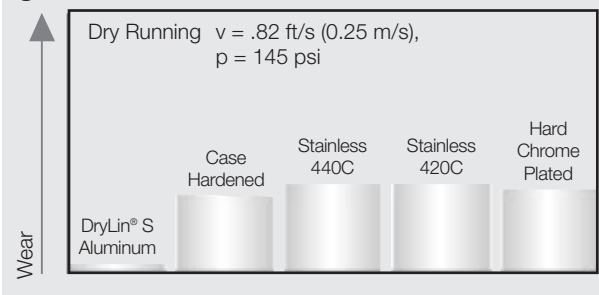


iglide® J200 Square



iglide® J200 Round

## iglide® J200 – various shaft materials



### The iglide® J200 material

iglide® J200 material is especially developed for hard anodized aluminum surfaces. Comprehensive laboratory tests showed that iglide® J200 is by far the most suitable polymer material for linear motion applications on aluminum rails. iglide® J200 is 3 times as abrasion resistant on anodized aluminum than hardened steel. Special Characteristics of iglide® J200:

- Extreme durability using anodized aluminum
- Low abrasion using anodized aluminum
- Excellent wear resistance using anodized aluminum
- Maintenance free

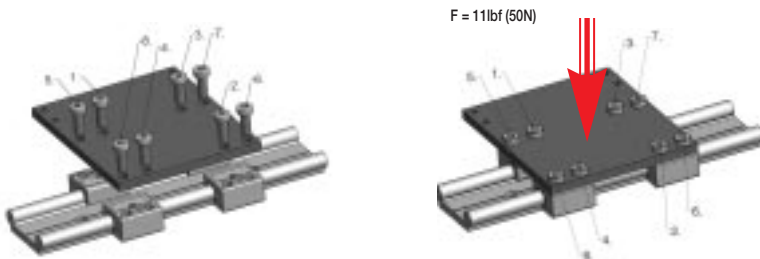
Igilde® J200 is standard on all DryLin® W products. DryLin® WS-10 (round) uses iglide® J as the standard liner material, but is also available with J200 upon request.

DryLin® W  
 Linear Guide  
 System

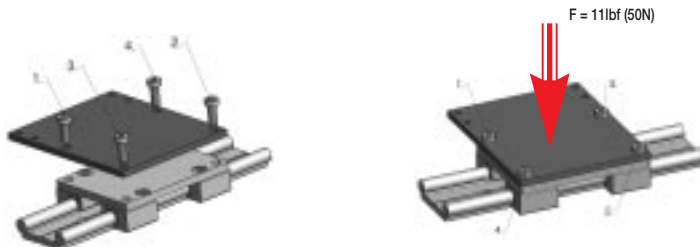
PDF: [www.igus.com/pdf/DryLin.asp](http://www.igus.com/pdf/DryLin.asp)  
 Specs/CAD/RFQ: [www.igus.com/DryLinN.asp](http://www.igus.com/DryLinN.asp)  
 RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)

## DryLin® W Mounting Instructions

For Parts WJ-



For Parts WK-



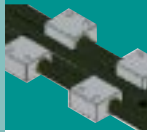
A thrust force of at least 11lbs (50N) applied to the center of the assembly is recommended during the mounting process.

### Fastener/Torque

- W-06: M4 = 13.27 lbf · in (1.5 Nm)
- W-10: M6 = 53 lbf · in (6 Nm)
- W-16: M8 = 133 lbf · in (15 Nm)
- W-20: M8 = 133 lbf · in (15 Nm)



mm



DryLin® W  
Linear Guide System

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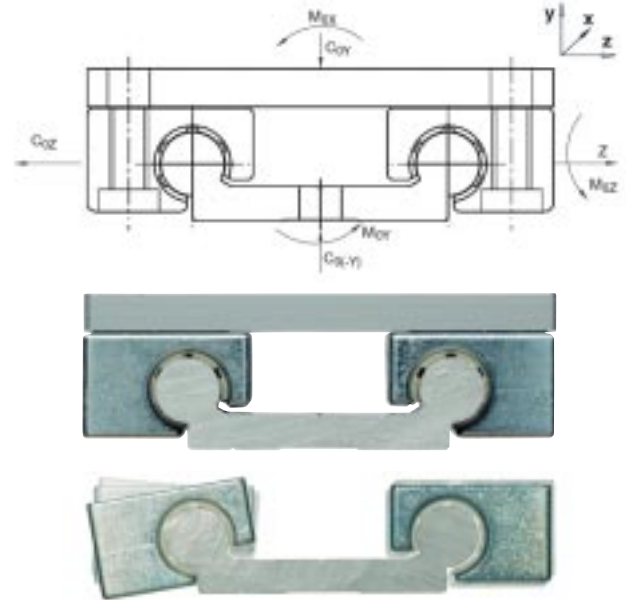
Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)

Type	Carriage Length		Carriage Width		Coy		Coz		Mox		Moy		Moz	
	(in.)	mm	(in.)	mm	(lbs)	N	(lbs)	N	(lbf · ft)	Nm	(lbf · ft)	Nm	(lbf · ft)	Nm
WW-06-30-06	(2.36)	60	(2.13)	54	(377)	1680	(377)	1680	(18)	25	(25)	34	(25)	34
WW-06-30-08	(3.15)	80	(2.13)	54	(377)	1680	(377)	1680	(18)	25	(37)	51	(37)	51
WW-06-30-10	(3.94)	100	(2.13)	54	(377)	1680	(377)	1680	(18)	25	(50)	68	(50)	68
WW-10-40-10	(3.94)	100	(2.87)	73	(1079)	4800	(1079)	4800	(70)	96	(125)	170	(125)	170
WW-10-40-15	(5.91)	150	(2.87)	73	(1079)	4800	(1079)	4800	(70)	96	(213)	290	(213)	290
WW-10-40-20	(7.87)	200	(2.87)	73	(1079)	4800	(1079)	4800	(70)	96	(302)	410	(302)	410
WW-10-80-10	(3.94)	100	(4.21)	107	(1079)	4800	(1079)	4800	(131)	178	(125)	170	(125)	170
WW-10-80-15	(5.91)	150	(4.21)	107	(1079)	4800	(1079)	4800	(131)	178	(213)	290	(213)	290
WW-10-80-20	(7.87)	200	(4.21)	107	(1079)	4800	(1079)	4800	(131)	178	(302)	410	(302)	410
WW-16-60-10	(3.94)	100	(4.09)	104	(1888)	8400	(1888)	8400	(177)	240	(199)	270	(199)	270
WW-16-60-15	(5.91)	150	(4.90)	104	(1888)	8400	(1888)	8400	(177)	240	(354)	480	(354)	480
WW-16-60-20	(7.87)	200	(4.09)	104	(1888)	8400	(1888)	8400	(177)	240	(509)	690	(509)	690
WW-20-80-15	(5.91)	150	(5.20)	134	(2877)	12800	(2877)	12800	(387)	525	(434)	670	(434)	670
WW-20-80-20	(7.87)	200	(5.20)	134	(2877)	12800	(2877)	12800	(387)	525	(730)	990	(730)	990
WW-20-80-25	(9.84)	250	(5.20)	134	(2877)	12800	(2877)	12800	(387)	525	(922)	1250	(922)	1250

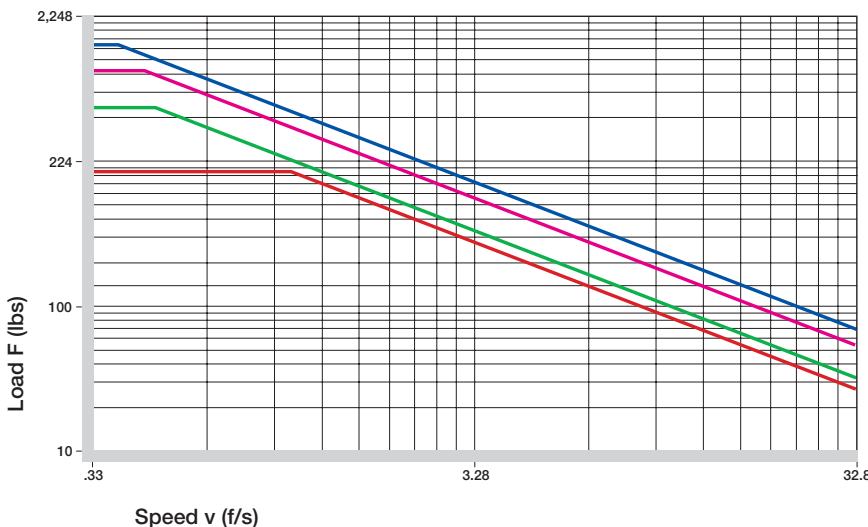
Load capacities for complete carriage plates

### DryLin® W – Rail Systems

	Size 6 (mm)	Size 10 (mm)	Size 16 (mm)	Size 20 (mm)
Single Rail – Round		●	●	●
Single Rail – Square	●	●	●	●
Double Rail	30 <sup>1/2</sup> ●	40 <sup>2</sup> , 80 <sup>2</sup> ● ●	60 <sup>2</sup> ●	80 <sup>2</sup> ●
Linear Guide System	●	●	●	●

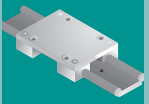


<sup>1</sup> Square double profile  
<sup>2</sup> Width double rails (mm)



■ Size 06  
■ Size 10  
■ Size 16  
■ Size 20

F x v Diagram, maximum permissible dynamic loads (4 bearing system)



Floating bearings for all directions compensate misalignments and parallelism errors

Floating bearings facilitate assembly – only necessary for individual rails.

Assembly is easy with the DryLin® WQ square profile. Floating bearings for all directions ( $\pm 1$  mm) compensate for misalignments and parallelism errors between rails. This includes jamming, otherwise only prevented by time-consuming parallel alignment of the system.

Although DryLin® W is a profile rail system, it is able to compensate angular rotation errors about the x-axis. An angular adjustment of  $\pm 7^\circ$  is possible. This effectively eliminates the problems known to occur when fitting to sheet metal.

## System Assembling: Rails

Fixed Floating



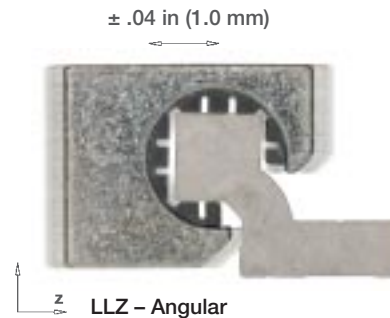
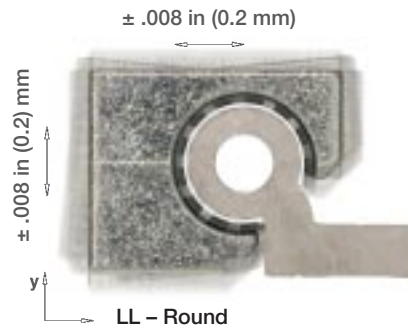
Fixed Floating

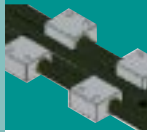


Fixed Floating



## Available floating bearing blocks





# DryLin® W Linear Guide Systems - Design Rules

DryLin® W  
Linear Guide System

Telephone 1-888-803-1895  
Fax 1-401-438-7680

Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)

When using systems with 2 parallel rails, one side must be designated as the “fixed” rail, and the opposite side as the “floating” rail.

### Why use floating bearings?

- promotes smooth gliding performance and maximizes bearing life
- prevents binding caused by parallelism and angle errors
- decreases necessary drive force and wear by minimizing friction-forces
- Enhances the precision of the system over the bearings' lifetime.
- Reduce assembly time and cost

### Fixed Bearings

The “fixed” bearing rail should be positioned closest to the drive force. This rail will determine the precision of the system; no system should contain more than two “fixed” bearings.

### Floating/Self-Aligning Bearings

The “floating” rail should be the rail located furthest from the drive force. It is to act only as a guide, and will compensate for any misalignments or angle errors in the system ensuring proper functionality.

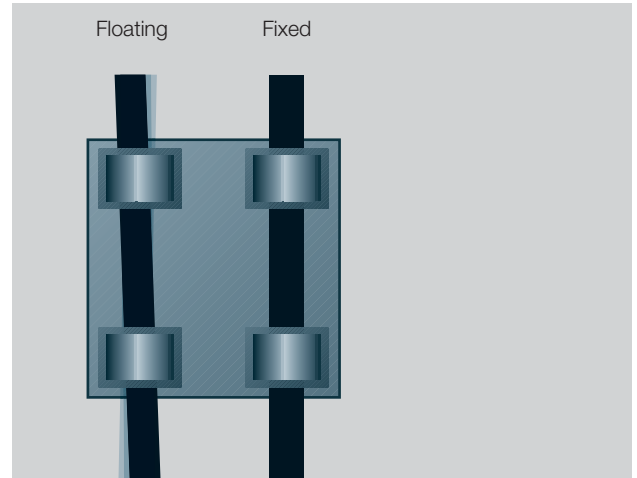
### Mounting Surfaces

The mounting surfaces for rails and bearings should have a very flat surface (e.g milled surface) in order to enhance performance. Variations in these surfaces may be compensated for by using floating bearings.

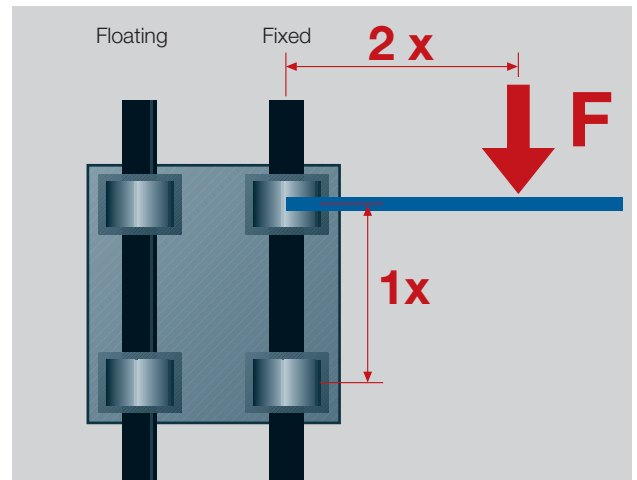
### Eccentric Forces — The 2:1 Rule

When using linear plain bearings it is important to ensure that the acting forces follow the 2:1 Rule (see drawing). If either the load or the drive force (F) is greater than twice the bearing length (1X), then a binding or interrupted motion may occur.

If the location of the drive force or load cannot be changed, simply increase the distance between the bearings, or create a counterbalance to move the center-of-gravity back within the 2 to 1 ratio.



Automatic compensation of parallelism errors



The 2:1 Rule

### Order example, complete system:

WK-10-40-15-01, 1500 for a complete system, consisting of 1500 mm rail and with a 150 mm-long and 40 mm-wide guide slide.

WK	-10	-40	-15	-01	-1500	LLZ	C5=20
----	-----	-----	-----	-----	-------	-----	-------



### Rail options

Leave blank: Standard with holes

C5 = ... mm: If hole spacing is not symmetrical

### Carriage options

Leave blank: Standard

LLZ: Floating z-direction

LLY: Floating y-direction

Length of rail

Number of carriage plates

Length of carriage plate

Support width

Shaft diameter

Complete system



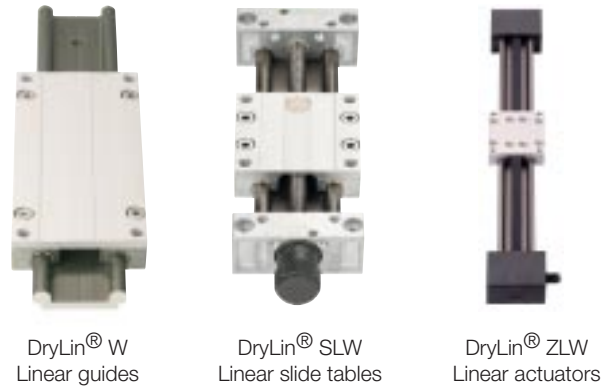
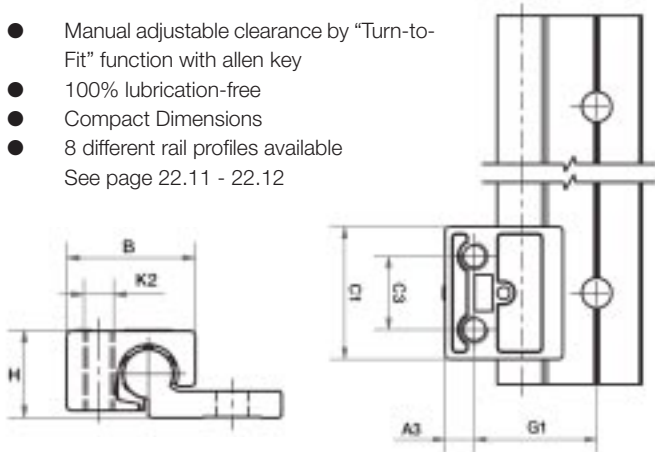
# DryLin® W Linear Guide Systems - "Turn-to-Fit"



DryLin® W 'Turn-To-Fit' adjustable carriages allow you to set the clearance for your application by using a set screw. The design also has a unique 'clicking' feature which audibly enables you to hear each revolution - so you can adjust to a set torque level and back off any number of revolutions to achieve your required fit. Currently available only in zinc-cast versions.

Can also be used in:

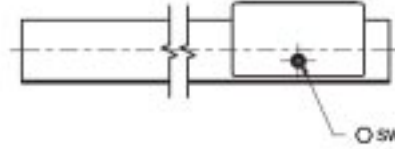
- Manual adjustable clearance by "Turn-to-Fit" function with allen key
  - 100% lubrication-free
  - Compact Dimensions
  - 8 different rail profiles available
- See page 22.11 - 22.12



DryLin® W Linear guides

DryLin® SLW Linear slide tables

DryLin® ZLW Linear actuators

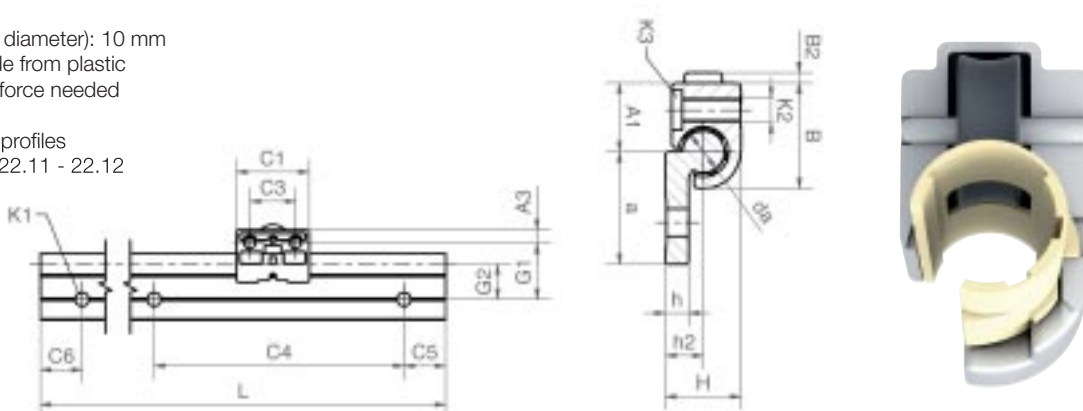


Part No.	Weight (g)	B (mm)	C1 (mm)	C3 (mm)	A3 (mm)	K2 (mm)	H (mm)	SW (mm)	G1 (mm)
WJUME-01-10	43	26	29	16	6.5	M6	18	1.5	27
WJ200UME-01-16	110	34.5	36	18	9	M8	27	2.5	33
WJ200UME-01-20	222	42.5	45	27	9	M8	36	2.5	38

## DryLin® W Linear Guide Systems - Hybrid Linear Bearing

An additional DryLin® W solution is a combined rolling and sliding carriage. Because of the defined load direction the required drive force is reduced by a maintenance free roller bearing. This system represents an ideal solution for many hand powered applications under 112 lbs. Ideal for machine tool guards, furniture and aerospace applications.

- Size (shaft diameter): 10 mm
  - Roller made from plastic
  - Low drive force needed
  - Low cost
  - 3 different profiles
- See page 22.11 - 22.12



Part No.	Weight (kg/m)	H (mm)	da (mm)	L (mm)	a (mm)	h (mm)	h2 (mm)	G1 (mm)	G2 (mm)	A1 (mm)	C4 (mm)	C5 min. (mm)	C5 max. (mm)	C6 min. (mm)	C6 max. (mm)	K1 for screw DIN 912
WS-10	0.62	18	10	4,000	27	5.5	9	27	17	16.5	120	20	79.5	20	79.5	M6
WS-10-40	1.00	18	10	4,000	40	5.5	9	30	20	16.5	120	20	79.5	20	79.5	M6
WS-10-80	1.50	18	10	4,000	74	5.5	9	27	17	16.5	120	20	79.5	20	79.5	M6

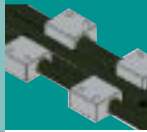
Part No.	Weight (g)	B (mm)	B2 (mm)	C1 (mm)	C3 (mm)	A3 (mm)	K2 (mm)	K3 (mm)
WJRM-01-10	46	26	2.5	35	22	6.5	M6	M5

DryLin® W Linear Guide System

PDF: [www.igus.com/pdf/DryLin.asp](http://www.igus.com/pdf/DryLin.asp)  
 Specs/CAD/RFQ: [www.igus.com/DryLinN.asp](http://www.igus.com/DryLinN.asp)  
 RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)



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# DryLin® W Linear Guide Systems - Single Rail - Square

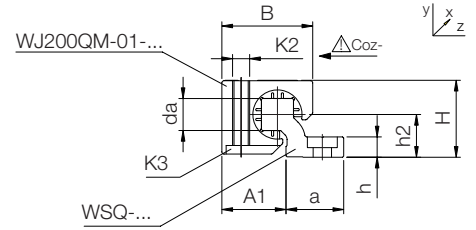
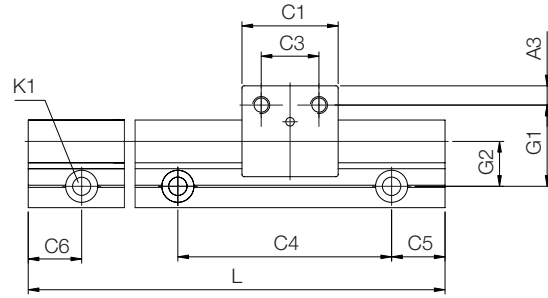
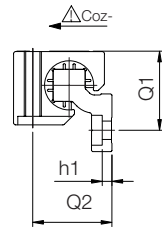
## 4 dimensions available

DryLin® W  
Linear Guide System

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Fax 1-401-438-7680



Bearing block  
Zinc, hard anodized  
aluminum and 316  
stainless steel option



Dimensions in (mm) unless otherwise specified

### DryLin® W guide rails – Square

Part No.	Weight (kg/m)	H ± 0.07 (mm)	da -0.1 (mm)	L Max. (mm)	a -0.3 (mm)	h	h1 (mm)	h2 (mm)	G1 (mm)	G2 (mm)	A1 (mm)	Q1 (mm)	Q2 (mm)
WSQ-06	0.23	14	5	3000	14	4	4*	7.5	18	10.5	13.5	17	15
WSQ-10	0.54	20	7.5	4000	25	5.5	5.5*	11	27	17	18.5	26	21
WSQ-16	0.94	27	11.5	4000	27	7.5	3.5	14	33	19	25	32	28
WSQ-20	1.41	36	15	4000	27	9.5	4.5	20	38	21	30	37	37

Part No.	C4 (mm)	C5 Min. (mm)	C5 Max. (mm)	C6 Min. (mm)	C6 Max. (mm)	K1 for screw DIN 912	ly (mm²)	lz (mm²)	Wby (mm²)	Wbz (mm²)
WSQ-06	60	20	49.5	20	49.5	M4*	2200	640	220	100
WSQ-10	120	20	79.5	20	79.5	M6*	16100	3300	950	350
WSQ-16	120	20	79.5	20	79.5	M8	33000	10800	1700	910
WSQ-20	120	20	79.5	20	79.5	M8	56500	34000	2600	2100

Standard bore pattern symmetrical: C5 = C6; please order C5 ≠ C6 with drawing

\* Through hole

### DryLin® W housing bearings – Square - Zinc

Part No.	Floating bearing play	Floating bearing direction	Weight (g)	B (mm)	C1 (mm)	C3 (mm)	A3 (mm)	K2 (mm)	K3 (mm)	Static load capacity		
										Coy lbf (N)	Coz+ lbf (N)	Coz- lbf (N)
WJ200QM-01-06	-	-	16	18	19	10	4.5	M4	M3	94 (420)	94 (420)	31 (140)
WJ200QM-01-06 LLZ	± 0.5	z	16	18	19	10	4.5	M4	M3	94 (420)	94 (420)	31 (140)
WJ200QM-01-06 LLY	± 0.5	y	16	18	19	10	4.5	M4	M3	94 (420)	94 (420)	31 (140)
WJ200QM-01-10** (AL)	-	-	20	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200QM-01-10 LLZ	± 0.7	z	41	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200QM-01-10 LLY	± 0.7	y	41	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200QM-01-16 (AL)	-	-	47	34.5	36	18	9	M8	M6	472 (2100)	472 (2100)	89 (400)
WJ200QM-01-16 LLZ	± 1.0	z	100	34.5	36	18	9	M8	M6	472 (2100)	472 (2100)	89 (400)
WJ200QM-01-16 LLY	± 1.0	y	100	34.5	36	18	9	M8	M6	472 (2100)	472 (2100)	89 (400)
WJ200QM-01-20**	-	-	94	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)
WJ200QM-01-20 LLZ	± 1.0	z	190	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)
WJ200QM-01-20 LLY	± 1.0	y	190	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)

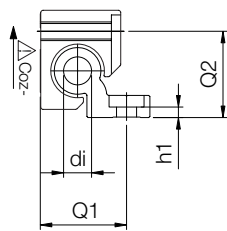
For the aluminum version add "-AL" after the part number. Example: **WJ200QM-01-10-AL**

\*\* Also available as stainless steel version. More on ► Page 22.14

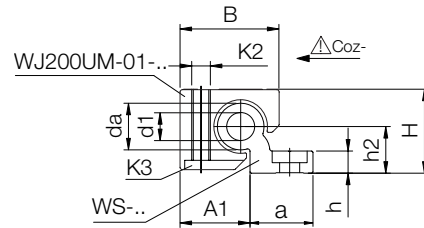
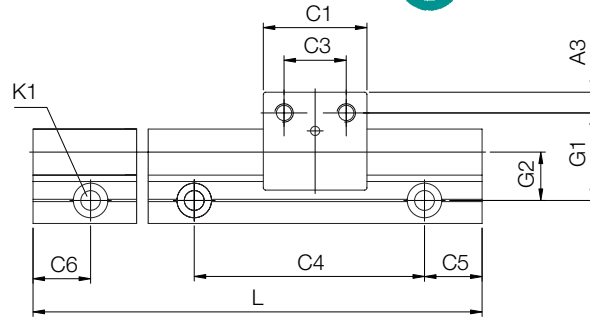
Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)

# DryLin® W Linear Guide Systems - Single Rail, Round

## 3 dimensions available



This bearing block orientation is not possible for WS-10. Use square WSQ-10



Dimensions in (mm) unless otherwise specified

### DryLin® W guide rails – Round

Part No.	Weight (kg/m)	H ± 0.07 (mm)	da -0.1 (mm)	di (mm)	L Max. (mm)	a -0.3 (mm)	h (mm)	h1 (mm)	h2 (mm)	G1 (mm)	G2 (mm)	A1 (mm)	Q1 (mm)	Q2 (mm)
WS-10	0.62	18	10	-	4000	27	5.5	5.5**	9	27	17	16.5	-	-
WS-16	0.98	27	16	8.0	4000	27	7.5	3.5	14	33	19	25	32	28
WS-20	1.32	36	20	10.2	4000	27	9.5	4.5	20	38	21	30	37	37

Part No.	C4 (mm)	C5 Min. (mm)	C5 Max. (mm)	C6 Min. (mm)	C6 Max. (mm)	K1 for screw DIN 912	ly (mm²)	lz (mm²)	Wby (mm²)	Wbz (mm²)
WS-10	120	20	79.5	20	79.5	M6**	19000	2850	1000	310
WS-16	120	20	79.5	20	79.5	M8	36000	12900	1800	940
WS-20	120	20	79.5	20	79.5	M8	57100	35000	2700	1900

Standard bore pattern symmetrical: C5 = C6; please order C5 ≠ C6 with drawing

\*\* Through hole

### DryLin® W housing bearings – Round

Part No.	Floating bearing play	Floating bearing direction	Weight (g)	B (mm)	C1 (mm)	C3 (mm)	A3 (mm)	K2 (mm)	K3 (mm)	Static load capacity		
										Coy lbf (N)	Coz+ lbf (N)	Coz- lbf (N)
WJ200UM-01-10*** (AL)	-	-	20	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200UM-01-10 LL	± 0.2	-	41	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200UM-01-16 (AL)	-	-	47	34.5	36	18	9	M8	M6	472 (2100)	472 (2100)	89 (400)
WJ200UM-01-20*** (AL)	-	-	94	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)
WJ200UM-01-20 LL	± 0.25	-	190	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)

For the aluminum version add "-AL" after the part number. Example: WJ200UM-01-10-AL-LLZ

\*\*\* Also available as stainless steel version. More on ► page 22.14

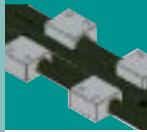


Adjustable clearance available (see page 22.9)

DryLin® W  
Linear Guide  
System

PDF: [www.igus.com/pdf/DryLin.asp](http://www.igus.com/pdf/DryLin.asp)  
Specs/CAD/Rfq: [www.igus.com/DryLinN.asp](http://www.igus.com/DryLinN.asp)  
RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)



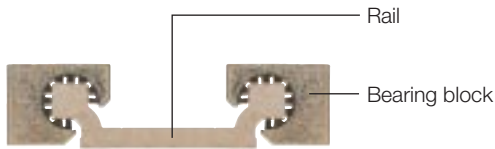
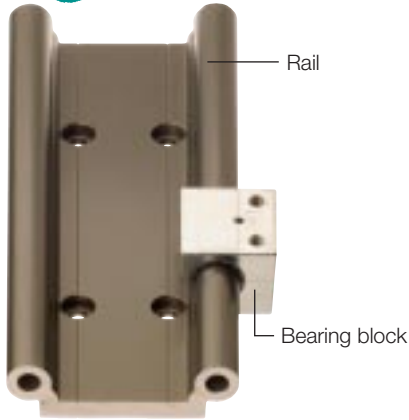


# DryLin® W Linear Guide Systems - Double Rail

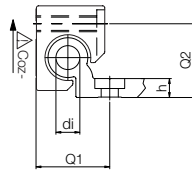
## 1 dimension square, 3 dimensions round

DryLin® W  
Linear Guide System

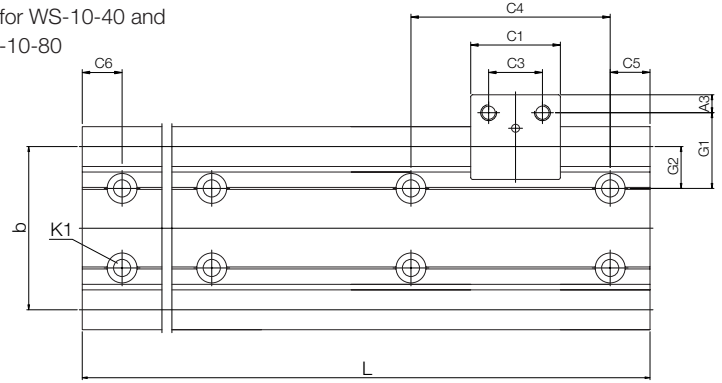
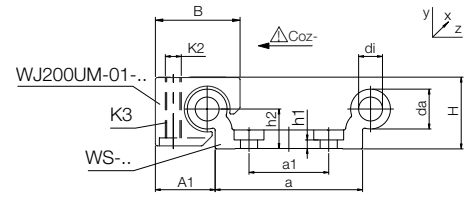
Telephone 1-888-803-1895  
Fax 1-401-438-7680



Form □: WSQ-06-30, WJ200QM-01-06



This bearing block orientation is not possible for WS-10-40 and WS-10-80



Dimensions in (mm) unless otherwise specified

### DryLin® W guide rails

Part No.	Form	Weight (kg/m)	H ± 0,07 (mm)	da -0,1 (mm)	di	L Max. (mm)	a -0,3 (mm)	b (mm)	h (mm)	h1 (mm)	h2 (mm)	G1 (mm)	G2 (mm)	a1*
WSQ-06-30	□	0.45	14	5	-	3000	27	30	4	4	7.5	18	10.5	-
WS-10-40	o	1.00	18	10	-	4000	40	40	5.5	5.5**	9	27	17	-
WS-10-80	o	1.50	18	10	-	4000	74	74	5.5	5.5**	9	27	17	40
WS-16-60	o	1.96	27	16	8.0	4000	54	58	7.5	3.5	14	33	19	-
WS-20-80	o	3.30	36	20	10.2	4000	74	82	9.5	4.5	20	38	21	40

\* WSQ-06-30, WS-10-40 and WS-16-60 have a single row of mounting holes down the centreline

\*\* WS-10-80 and WS-20-80 have two parallel rows of mounting holes

Part No.	Form	C4 (mm)	C5 Min. (mm)	C5 Max. (mm)	C6 Min. (mm)	C6 Max. (mm)	K1 for screw DIN 912	ly (mm²)	lz (mm²)	Wby (mm³)	Wbz (mm³)
WSQ-06-30	□	60	20	49.5	20	49.5	M4	19000	1250	1100	200
WS-10-40	o	120	20	79.5	20	79.5	M6***	91000	5100	3600	590
WS-10-80	o	120	20	79.5	20	79.5	M6***	388000	6100	9200	650
WS-16-60	o	120	20	79.5	20	79.5	M8	367600	26100	9900	1900
WS-20-80	o	120	20	79.5	20	79.5	M8	1080000	78700	21000	4000

Standard bore pattern symmetrical: C5 = C6; please order C5 ≠ C6 with drawing. \*\*\* Through bore

### DryLin® W housing bearings

Part No.	Form	Floating bearing play	Floating bearing direction	Weight (g)	B (mm)	C1 (mm)	C3 (mm)	A3 (mm)	K2 (mm)	K3 (mm)	Static load capacity		
											Coy (N)	Coz+ (N)	Coz- (N)
WJ200QM-01-06	□	-	-	16	18	19	10	4.5	M4	M3	94 (420)	94 (420)	31 (140)
WJ200UM-01-10****(AL)	o	-	-	41	26	29	16	6.5	M6	M5	270 (1200)	270 (1200)	56 (250)
WJ200UM-01-16 (AL)	o	-	-	100	34.5	36	18	9	M8	M6	472 (2100)	472 (2100)	89 (400)
WJ200UM-01-20****(AL)	o	-	-	190	42.5	45	27	9	M8	M6	719 (3200)	719 (3200)	112 (500)

For the aluminum version add "-AL" after the part number. Example: WJ200UM-01-10-AL

\*\*\*\* Also available as stainless steel version. More on ► Page 22.14



Adjustable clearance available

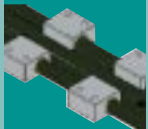
Also available as pre-assembled driven systems

SLW - Page 25.9

ZLW - Page 25.22

Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)

# DryLin® W Linear Guide Systems - Carriages, assembled

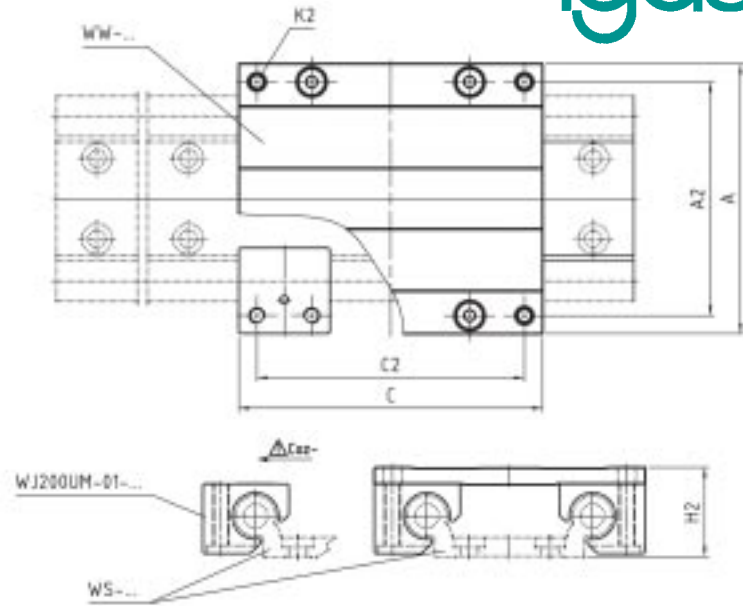


DryLin® W  
Linear Guide  
System

PDF: [www.igus.com/pdf/DryLin.asp](http://www.igus.com/pdf/DryLin.asp)  
Specs/CAD/RFQ: [www.igus.com/DryLinN.asp](http://www.igus.com/DryLinN.asp)  
RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)

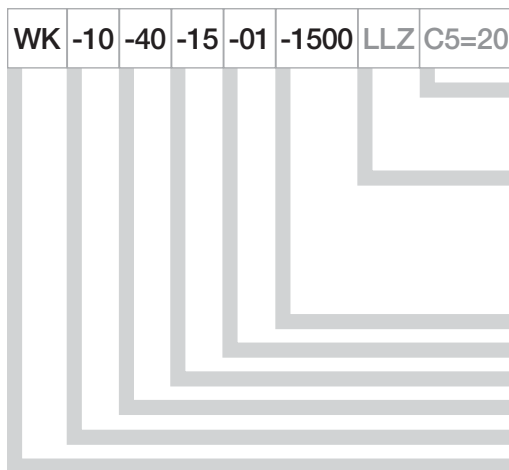


DryLin® W Carriages, fitted



Part No.	Suitable rail Part No.	WT (kg)	A Width (mm)	C Length (mm)	A2 (mm)	C2 (mm)	K2 (mm)	H2 ±0.17 (mm)	Static load capacity				
									Coy lbs (N)	Coz lbs (N)	Mox lbs (Nm)	Moy lbf-ft (Nm)	Moz lbf-ft (Nm)
WW-06-30-06	WSQ-06-30	0.10	54	60	45	51	M4	18	377 (1680)	377 (1680)	18 (25)	25 (34)	25 (34)
WW-06-30-08	WSQ-06-30	0.11	54	80	45	71	M4	18	377 (1680)	377 (1680)	18 (25)	37 (51)	37 (51)
WW-06-30-10	WSQ-06-30	0.12	54	100	45	91	M4	18	377 (1680)	377 (1680)	18 (25)	50 (68)	50 (68)
WW-10-40-10	WS-10-40	0.29	73	100	60	87	M6	24	1079 (4800)	1079 (4800)	70 (96)	125 (170)	125 (170)
WW-10-40-15	WS-10-40	0.34	73	150	60	137	M6	24	1079 (4800)	1079 (4800)	70 (96)	213 (290)	213 (290)
WW-10-40-20	WS-10-40	0.40	73	200	60	187	M6	24	1079 (4800)	1079 (4800)	70 (96)	302 (410)	302 (410)
WW-10-80-10	WS-10-80	0.34	107	100	94	87	M6	24	1079 (4800)	1079 (4800)	131 (178)	125 (170)	125 (170)
WW-10-80-15	WS-10-80	0.42	107	150	94	137	M6	24	1079 (4800)	1079 (4800)	131 (178)	213 (290)	213 (290)
WW-10-80-20	WS-10-80	0.50	107	200	94	187	M6	24	1079 (4800)	1079 (4800)	131 (178)	302 (410)	302 (410)
WW-16-60-10	WS-16-60	0.71	104	100	86	82	M8	35	1888 (8400)	1888 (8400)	177 (240)	199 (270)	199 (270)
WW-16-60-15	WS-16-60	0.84	104	150	86	132	M8	35	1888 (8400)	1888 (8400)	177 (240)	354 (480)	354 (480)
WW-16-60-20	WS-16-60	0.97	104	200	86	182	M8	35	1888 (8400)	1888 (8400)	177 (240)	508 (690)	508 (690)
WW-20-80-15	WS-20-80	1.20	134	150	116	132	M8	44	2878 (12800)	2878 (12800)	387 (525)	494 (670)	494 (670)
WW-20-80-20	WS-20-80	1.30	134	200	116	182	M8	44	2878 (12800)	2878 (12800)	387 (525)	730 (990)	730 (990)
WW-20-80-25	WS-20-80	1.50	134	250	116	232	M8	44	2878 (12800)	2878 (12800)	387 (525)	922 (1250)	922 (1250)

Part No. for a complete system:



**Rail options**

- Leave blank: Standard with holes
- C5 = ... mm: If hole spacing is not symmetrical

**Carriage options**

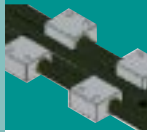
- Leave blank: Standard
- LLZ: Floating z-direction
- LLY: Floating y-direction

- Length of rail
- Number of carriage plates
- Length of carriage plate
- Support width
- Shaft diameter
- Complete system



**Order example, complete system:**

WK-10-40-15-01-1500 for a complete system, consisting of 1500 mm rail and with a 150 mm-long and 40 mm-wide guide slide.

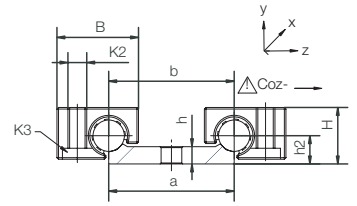
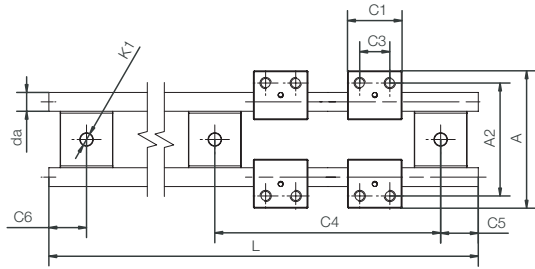


# DryLin® W Linear Guide Systems, 316 Stainless Steel

DryLin® W  
Linear Guide System

Telephone 1-888-803-1895  
Fax 1-401-438-7680

Internet: <http://www.igus.com>  
E-Mail: [sales@igus.com](mailto:sales@igus.com)  
QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)



## DryLin® W Guide rail, double, ø 10 mm

Part No.	Suitable bearing (Part No.)	Weight (kg/m)	da h9 (mm)	L Max. (mm)	a -0,3 (mm)	b (mm)	h (mm)	h2 (mm)
WS-10-40-ES (FG)	WJUM-01-10-ES (FG)	1.58	10	3000	40	40	5.5	9

(FG) - cast 316

Part No.	C4 (mm)	C5 Min. (mm)	C5 Max. (mm)	C6 Min. (mm)	C6 Max. (mm)	K1 for screw DIN 912
WS-10-40-ES (FG)	120	20	79.5	20	79,5	M6

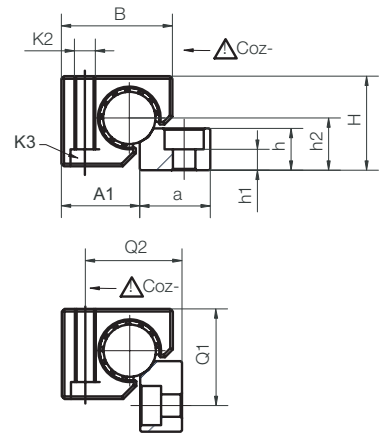
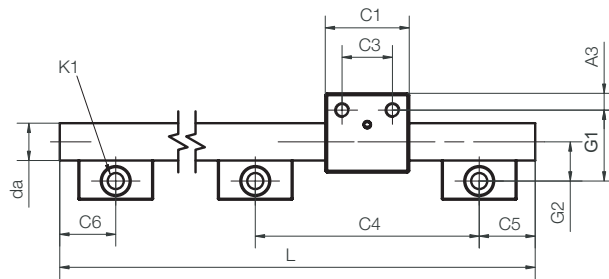
(FG) - cast 316

## DryLin® W housing bearings

Part No.	Weight (g)	H ±0,07 (mm)	B (mm)	C1 (mm)	C3 (mm)	A (mm)	A2 (mm)	K2 (mm)	K3 Countersunk screw	Static load capacity		
										Coy lbs (N)	Coz+ lbs (N)	Coz- lbs (N)
WJUM-01-10-ES (FG)*	57	18	26	29	16	73	60	M6	M5	854 (3800)	854 (3800)	213 (950)

(FG) - cast 316

\* TUM-01-10 liners are optional extra, page 24.26, for high temperatures



## DryLin® W-Guide rail, single, ø 20 mm

Part No.	Suitable bearing (Part No.)	Weight (kg/m)	da h9 (mm)	L Max. (mm)	a -0,3 (mm)	h (mm)	h2 (mm)	G2 (mm)
WS-20-ES (FG)	WJUM-01-20-ES (FG)	3.37	20	3000	27	16	20	21

(FG) - cast 316

Part No.	C4 (mm)	C5 Min. (mm)	C5 Max. (mm)	C6 Min. (mm)	C6 Max. (mm)	K1 for screw DIN 912	h1 (mm)	ly (mm²)	lz (mm²)	Wby (mm³)	Wbz (mm³)
WS-20-ES (FG)	120	20	79.5	20	79,5	M8	8	7854	7854	785	785

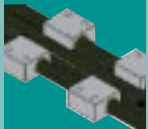
(FG) - cast 316

## DryLin® W housing bearings

Part No.	WT (g)	H ±0,07 (mm)	B (mm)	C1 (mm)	C3 (mm)	G1 (mm)	A3 (mm)	A1 (mm)	K2 Countersunk-head screw	K3 (mm)	Q1 (mm)	Q2 Coy (N)	Static load capacity		
													Coz+ (N)	Coz- (N)	
WJUM-01-20-ES (FG)*	280	36	42.5	45	27	38	9	30	M8	M6	37	37	2473 (11000)	2473 (11000)	4270(1900)

\* TUMO-01-20 liners are optional for high temperatures up to 482°F  
(FG) - cast 316

# DryLin® W Linear Guide Systems



## DryLin® W – various sliding parts

### Special properties

- Quick replacement
- Low friction
- Low abrasion
- Round and square version available
- “fast-and-slow”-motion possible
- Material iglide® J200



#### Part No. structure for the liners:

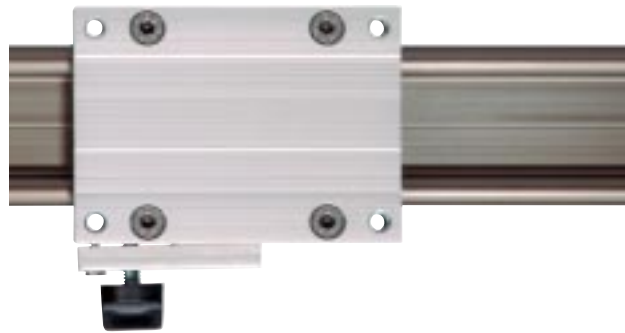
- J200QM-01-...□ Square liner for square rails WSQ-... and for bearings WJ200QM-...
- J200UMO-01-...∅ Round liner for round rails WS-... and for bearing WJ200UM-...

## DryLin® W – Accessories

### DryLin® W – manual clamp

#### Special properties

- For simple positioning duties
- Low-cost
- Universal applications
- Clamping force depending on tightening torque
- Clamping is produced by friction



DryLin® W manual clamp developed for simple functions  
Part No.: WHKA-10, WHKA-16 and WHKA-20

### DryLin® W – digital measuring device

#### Special properties

- **Installation:** right (R) or left (L) of guide carriage
- **Measuring principle:** magnetic with magnetic tape (10 x 1.4 mm)
- **Resolution:** 0.1 mm
- **Accuracy:**  $\pm(0.1 + 0.01 \times \text{measured length (m)})$  mm
- **Service life:** 5 years powered 100% of the time
- **Operation temperature:** +32 °C to +140 °C
- **Display:** LCD
- **Repeat accuracy:**  $\pm 1$  Digit
- **Absolute and incremental measuring method**



Wireless measuring device with direct, digital indication of position  
Part No.: WKM-10 / WKM-20

### Clean room suitability and ESD-compatibility



You can find detailed results on  
► Page 20.12

DryLin® W  
Linear Guide  
System

PDF: [www.igus.com/pdf/DryLin.asp](http://www.igus.com/pdf/DryLin.asp)  
Specs/CAD/Rfq: [www.igus.com/DryLinN.asp](http://www.igus.com/DryLinN.asp)  
RoHS info: [www.igus.com/RoHS.asp](http://www.igus.com/RoHS.asp)





DryLin® W  
Linear Guide System

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QuickSpec: [www.igus.com/qs/DryLin.asp](http://www.igus.com/qs/DryLin.asp)