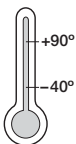




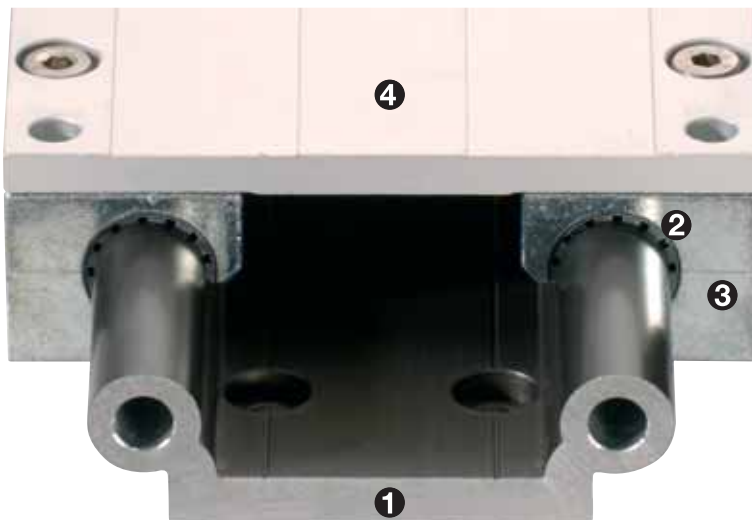
DryLin® W | Flexible Linear Guide System

DryLin® W is offered as a cost-effective, fully assembled system. The design of DryLin® W promotes design flexibility and ease of assembly, with both single and double rail configurations. Hard anodized aluminium is used as the rail material, and DryLin® W also offers low wear, low friction without lubrication, resistance to dirt and dust, low weight and quiet operation.



Technical Data

Sliding elements:
Maintenance-free
Material:
iglidur® J / J200
Max. surface speed:
15 m/s
Temperature range:
-40 °C to +90 °C



mm

DryLin® W

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Fax +44 (0) 16 04 - 67 72 45



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

Advantages of DryLin® W

- Easy installation, maintenance-free
- Economic zinc die cast slide with JUM liners
- Dry running properties make the system dirt resistant
- Lightweight and quiet operation
- Tolerates high moments
- Suitable for mono-rail systems

Special properties

- Resistant to dust and dirt
- Flat and wide for supporting high moments
- Allows flexible use of design space
- Low coefficients of friction for dry running
- Rugged, corrosion-free and wear-resistant
- Low-noise operation
- Rails made of hard anodized aluminium
- iglidur® J200 liners
- Dimensions allow use with commercial aluminium profiles



DryLin® W in permanent use in a conveyor belt

DryLin® W – Digital measuring system



DryLin® W with accessories: ► Page 63.11



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

- 1 Hard anodized aluminium rail
(Option: Stainless steel version V4A, page 63.10)
- 2 Liners made from iglidur® J200
- 3 Zinc chromed die cast housing
(Option: Stainless steel version V4A, page 63.10)
- 4 Anodized aluminium mounting plate
in 2 widths and 3 lengths for each size



DryLin® W – Highest design flexibility

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E-mail sales_uk@igus.co.uk



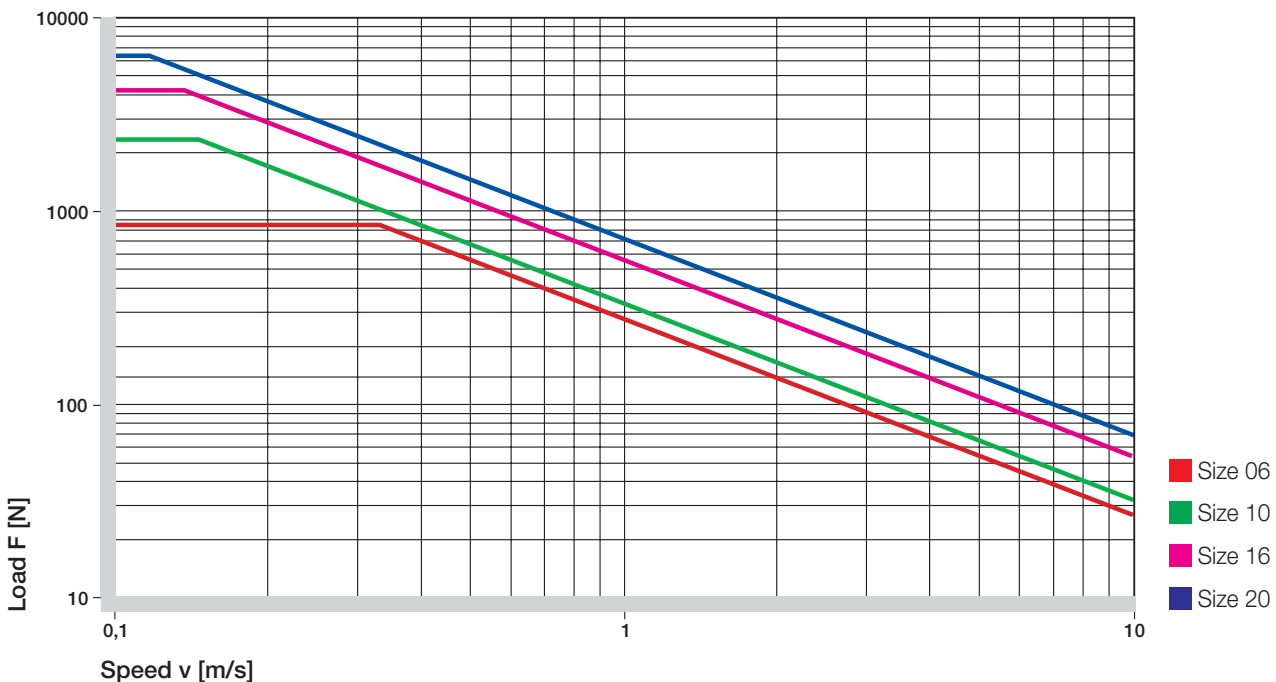
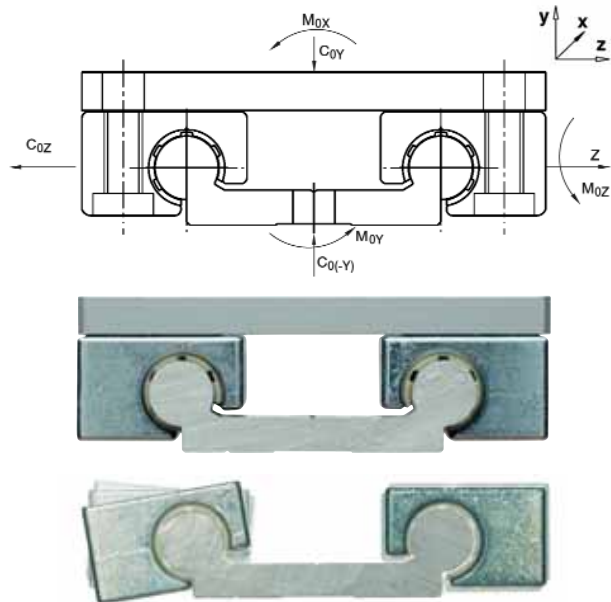
Type	Carriage length [mm]	Carriage width [mm]	Coy [N]	Coz [N]	Mox [Nm]	Moy [Nm]	Moz [Nm]
WW-06-30-06	60	54	1680	1680	25	34	34
WW-06-30-08	80	54	1680	1680	25	51	51
WW-06-30-10	100	54	1680	1680	25	68	68
WW-10-40-10	100	73	4800	4800	96	170	170
WW-10-40-15	150	73	4800	4800	96	290	290
WW-10-40-20	200	73	4800	4800	96	410	410
WW-10-80-10	100	107	4800	4800	178	170	170
WW-10-80-15	150	107	4800	4800	178	290	290
WW-10-80-20	200	107	4800	4800	178	410	410
WW-16-60-10	100	104	8400	8400	240	270	270
WW-16-60-15	150	104	8400	8400	240	480	480
WW-16-60-20	200	104	8400	8400	240	690	690
WW-20-80-15	150	134	12800	12800	525	670	670
WW-20-80-20	200	134	12800	12800	525	990	990
WW-20-80-25	250	134	12800	12800	525	1250	1250

Table 63.1: Load capacities for complete carriage plates

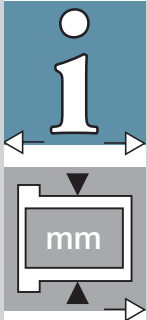
DryLin® W – Rail Systems

	Size 6 [mm]	Size 10 [mm]	Size 16 [mm]	Size 20 [mm]
Single Rail – Round		•	•	•
Single Rail – Square	•	•	•	•
Double Rail	30 ^{1/2}	40 ² , 80 ²	60 ²	80 ²
Linear Guide System	•	•	•	•

¹ Square double profil
² Width double rails [mm]



Graph 63.1: F x v Diagram, maximum permissible dynamic loads (4 bearing system)





Floating bearings facilitate assembly – only necessary for individual rails.

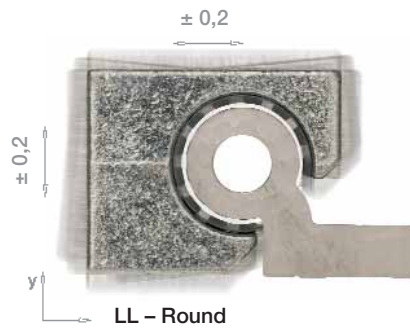
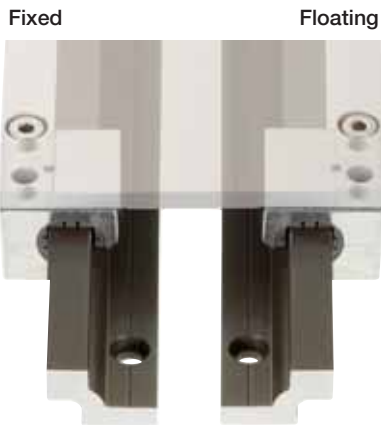


Floating bearings for all directions (± 1 mm) compensate misalignments and parallelism errors

Assembly is easy with the DryLin® WQ – a square profile. Floating bearings for all directions (± 1 mm) compensate misalignments and parallelism errors between rails. This precludes 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 here. This effectively eliminates the strain known to occur when fitting to sheet metal fabrications.

Available floating bearing blocks



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E-mail sales_uk@igus.co.uk

mm

DryLin® W



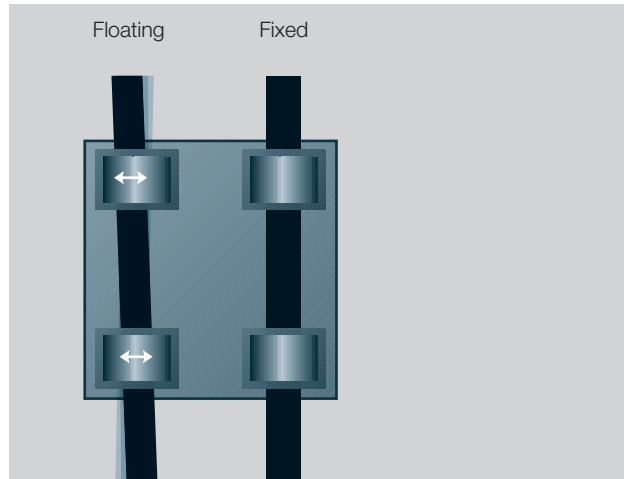
Floating bearings for linear slide guides

In the case of a system with two parallel guides, one side needs to be configured with floating bearings.

A suitable solution comprising fixed & floating bearings is available for every orientation, 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 play in the direction of the expected parallelism error. This creates an additional degree of freedom on one side.

During assembly, it must be ensured that the floating bearings exhibit a similar degree of play in both directions.

The contact surfaces on the guides and carriages should be sufficiently flat (for instance, milled down) to prevent strains from occurring in the system.



Automatic compensation of parallelism errors

Eccentric Forces

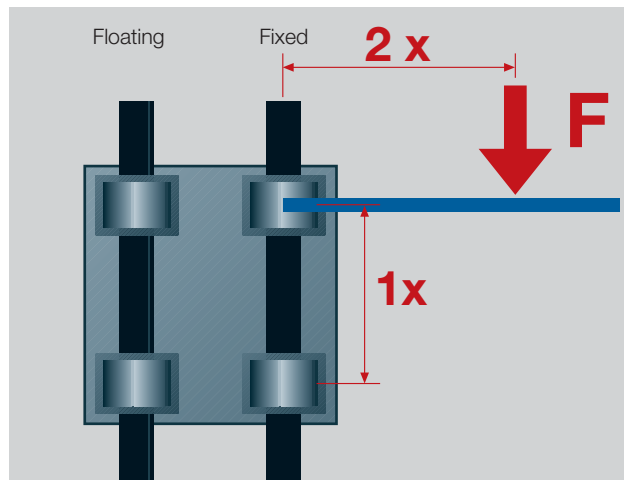
To ensure successful use of maintenance-free DryLin® linear bearings, it is necessary to follow certain recommendations:

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 seizure. 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 slide bearings can result in uneven motion or even system blockage. Such situations can often be remedied with relatively simple modifications.

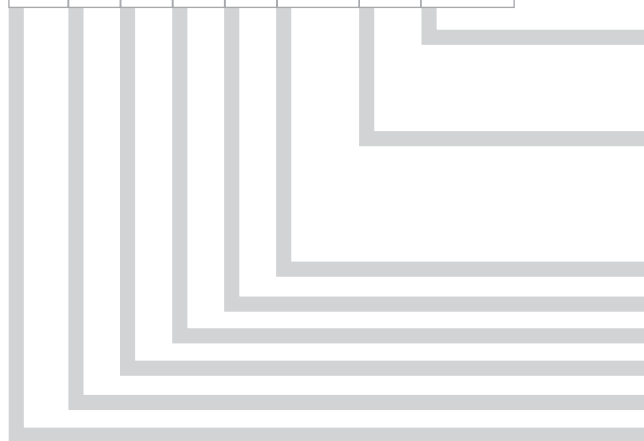
If you have any questions on design and/or assembly, please contact our application engineers.



The 2:1 Rule

Part No. for a complete system:

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

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
mm

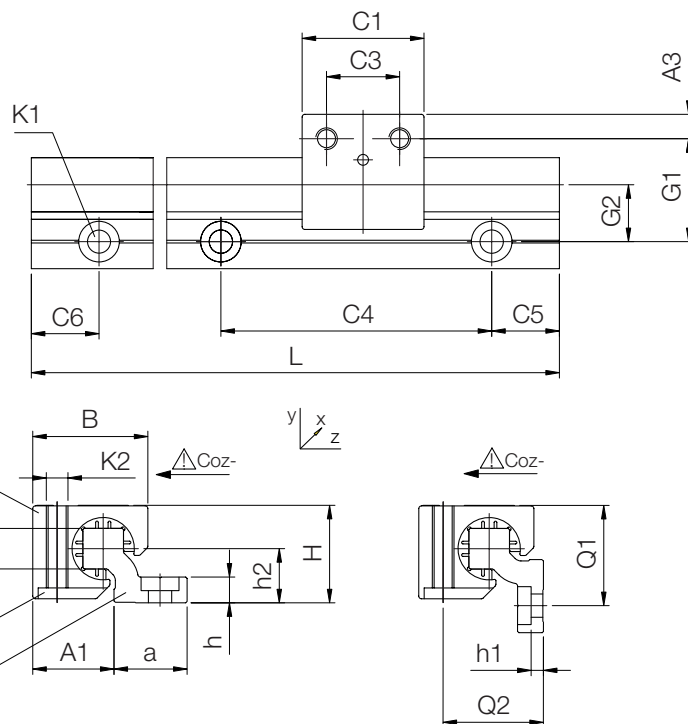
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DryLin® W | Single Rail | Square

4 Dimensions □: 6, 10, 16, 20 mm



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	h2	G1	G2	A1	Q1	Q2
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	C5 Min.	C5 Max.	C6 Min.	C6 Max.	K1 for screw DIN 912	ly [mm ⁴]	lz [mm ⁴]	Wby [mm ³]	Wbz [mm ³]
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 bore

DryLin® W housing bearings – Square

Part No.	Floating bearing		Weight [g]	B [mm]	C1 [mm]	C3 [mm]	A3 [mm]	K2 [mm]	K3 [mm]	Static load capacity		
	play	direction								Coy [N]	Coz+ [N]	Coz- [N]
WJ200QM-01-06	-	-	16	18	19	10	4,5	M4	M3	420	420	140
WJ200QM-01-06 LLZ	± 0,5	z	16	18	19	10	4,5	M4	M3	420	420	140
WJ200QM-01-06 LLY	± 0,5	y	16	18	19	10	4,5	M4	M3	420	420	140
WJ200QM-01-10**	-	-	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200QM-01-10 LLZ	± 0,7	z	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200QM-01-10 LLY	± 0,7	y	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200QM-01-16	-	-	100	34,5	36	18	9	M8	M6	2100	2100	400
WJ200QM-01-16 LLZ	± 1,0	z	100	34,5	36	18	9	M8	M6	2100	2100	400
WJ200QM-01-16 LLY	± 1,0	y	100	34,5	36	18	9	M8	M6	2100	2100	400
WJ200QM-01-20**	-	-	190	42,5	45	27	9	M8	M6	3200	3200	500
WJ200QM-01-20 LLZ	± 1,0	z	190	42,5	45	27	9	M8	M6	3200	3200	500
WJ200QM-01-20 LLY	± 1,0	y	190	42,5	45	27	9	M8	M6	3200	3200	500

** Also available as stainless steel version. More on ► Page 63.10

mm

DryLin® W

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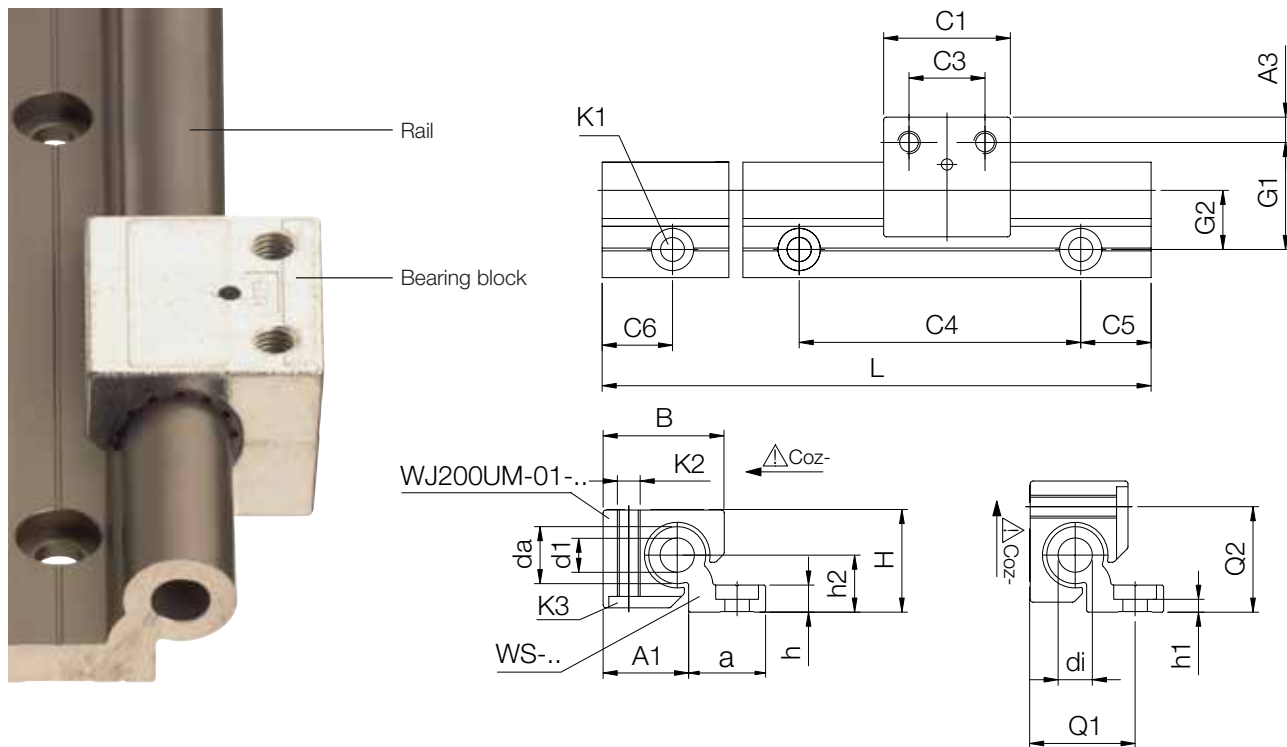
igus® UK Ltd

Internet www.igus.co.uk

E-mail sales_uk@igus.co.uk

DryLin® W | Single Rail | Round

3 Dimensions Ø: 10, 16, 20 mm



This bearing block orientation is not possible for WS-10

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 [mm³]	Wbz [mm³]
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 [N]	Coz+ [N]	Coz- [N]
WJ200UM-01-10***	-	-	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200UM-01-10 LL	± 0,2	-	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200UM-01-16	-	-	100	34,5	36	18	9	M8	M6	2100	2100	400
WJ200UM-01-20***	-	-	190	42,5	45	27	9	M8	M6	3200	3200	500
WJ200UM-01-20 LL	± 0,25	-	190	42,5	45	27	9	M8	M6	3200	3200	500

*** Also available as stainless steel version. More on ► page 63.10

DryLin® W

mm

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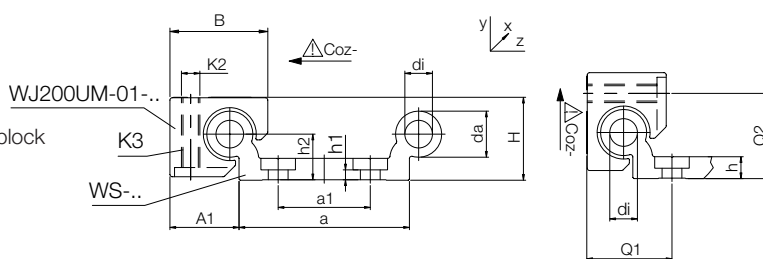
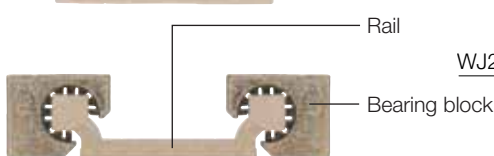
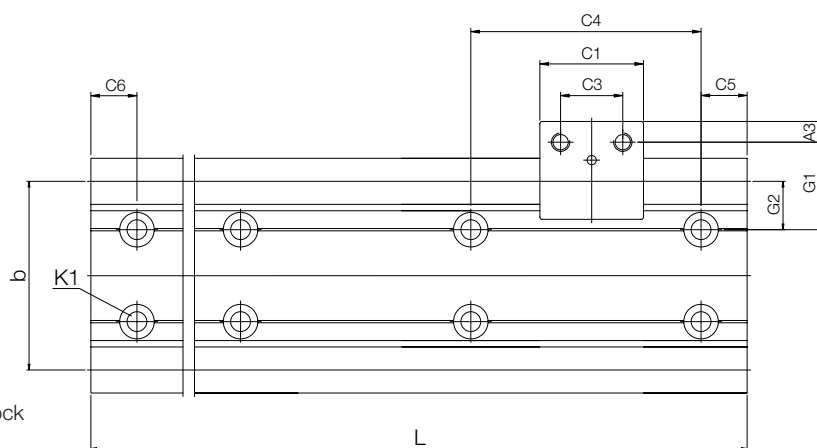
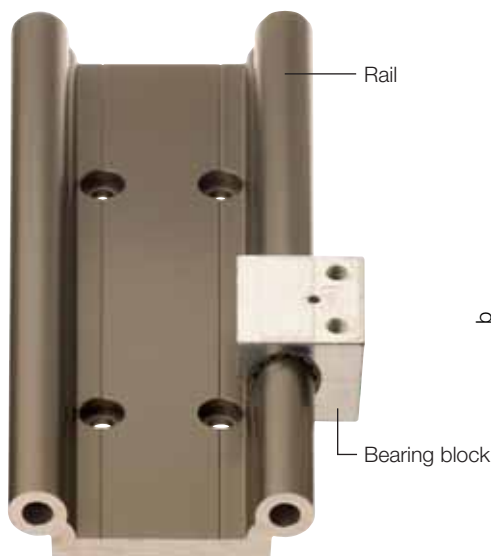
All parts can be ordered individually or as an assembled system ► Page 63.5



DryLin® W | Double Rail

1 Dimension square: □ 6 mm

3 Dimensions round: ø 10, ø 16, ø 20 mm



Form □: WSQ-06-30, WJ200QM-01-06

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

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	h	h1	h2	G1	G2	a1*
WSQ-06-30	□	0,45	14	5	-	3000	27	30	4	4	7,5	18	10,5	-
WS-10-40	○	1,00	18	10	-	4000	40	40	5,5	5,5**	9	27	17	-
WS-10-80	○	1,50	18	10	-	4000	74	74	5,5	5,5**	9	27	17	40
WS-16-60	○	1,96	27	16	8,0	4000	54	58	7,5	3,5	14	33	19	-
WS-20-80	○	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	C5 Min.	C5 Max.	C6 Min.	C6 Max.	K1 for screw DIN 912	ly	lz	Wby	Wbz
		[mm]	[mm]	[mm]	[mm]	[mm]		[mm ⁴]	[mm ⁴]	[mm ³]	[mm ³]
WSQ-06-30	□	60	20	49,5	20	49,5	M4	19000	1250	1100	200
WS-10-40	○	120	20	79,5	20	79,5	M6***	91000	5100	3600	590
WS-10-80	○	120	20	79,5	20	79,5	M6***	388000	6100	9200	650
WS-16-60	○	120	20	79,5	20	79,5	M8	367600	26100	9900	1900
WS-20-80	○	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	420	420	140
WJ200UM-01-10****	○	-	-	41	26	29	16	6,5	M6	M5	1200	1200	250
WJ200UM-01-16	○	-	-	100	34,5	36	18	9	M8	M6	2100	2100	400
WJ200UM-01-20****	○	-	-	190	42,5	45	27	9	M8	M6	3200	3200	500

**** Also available as stainless steel version. More on ► Page 63.10



All parts can be ordered individual or as assembled system ► Page 63.5

mm

DryLin® W

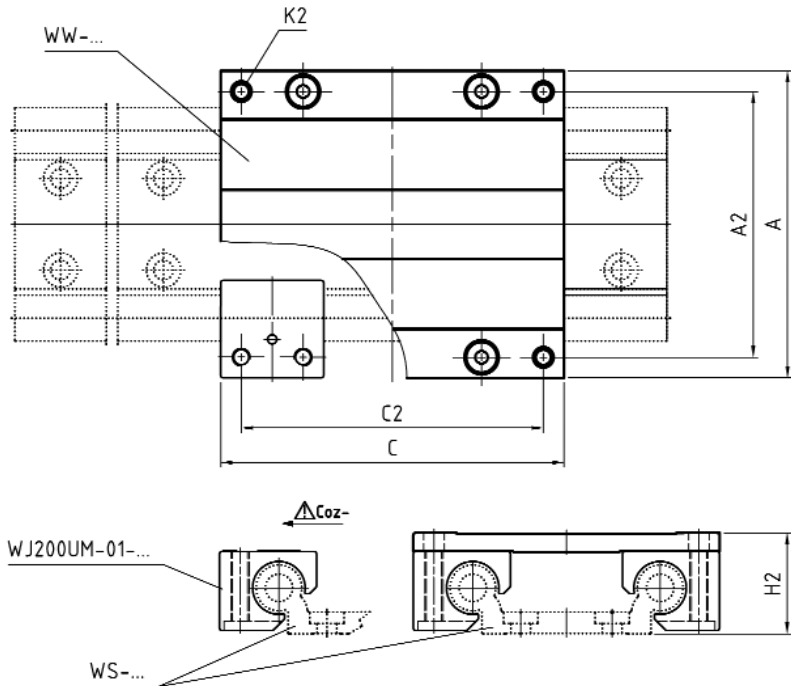
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DryLin® W Carriages, fitted

Part No.	Suitable rail Part No.	Weight [kg]	A [mm]	C [mm]	A2 [mm]	C2 [mm]	K2 [mm]	H2 [mm]	Static load capacity				
									Coy [N]	Coz [N]	Mox [Nm]	Moy [Nm]	Moz [Nm]
WW-06-30-06	WSQ-06-30	0,10	54	60	45	51	M4	18	1680	1680	25	34	34
WW-06-30-08	WSQ-06-30	0,11	54	80	45	71	M4	18	1680	1680	25	51	51
WW-06-30-10	WSQ-06-30	0,12	54	100	45	91	M4	18	1680	1680	25	68	68
WW-10-40-10	WS-10-40	0,29	73	100	60	87	M6	24	4800	4800	96	170	170
WW-10-40-15	WS-10-40	0,34	73	150	60	137	M6	24	4800	4800	96	290	290
WW-10-40-20	WS-10-40	0,40	73	200	60	187	M6	24	4800	4800	96	410	410
WW-10-80-10	WS-10-80	0,34	107	100	94	87	M6	24	4800	4800	178	170	170
WW-10-80-15	WS-10-80	0,42	107	150	94	137	M6	24	4800	4800	178	290	290
WW-10-80-20	WS-10-80	0,50	107	200	94	187	M6	24	4800	4800	178	410	410
WW-16-60-10	WS-16-60	0,71	104	100	86	82	M8	35	8400	8400	240	270	270
WW-16-60-15	WS-16-60	0,84	104	150	86	132	M8	35	8400	8400	240	480	480
WW-16-60-20	WS-16-60	0,97	104	200	86	182	M8	35	8400	8400	240	690	690
WW-20-80-15	WS-20-80	1,20	134	150	116	132	M8	44	12800	12800	525	670	670
WW-20-80-20	WS-20-80	1,30	134	200	116	182	M8	44	12800	12800	525	990	990
WW-20-80-25	WS-20-80	1,50	134	250	116	232	M8	44	12800	12800	525	1250	1250

Part No. for a complete system:

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

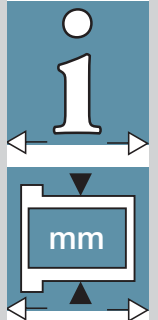
- Leave blank: Standard
- LLZ: Floating z-direction
- LLY: Floating y-direction

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



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.



mm