cpc 直得科技股份有限公司
CHIEFTEK PRECISION CO., LTD.

ARC/HRC/ERC series

Linear motion technology

ARC/HRC/ERC Ball Type Linear Guide Series

ARC-04-N31-EN

* Please note that the specificaions are subject to change without notice due to product improvements.

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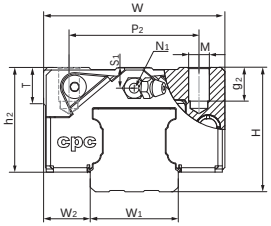
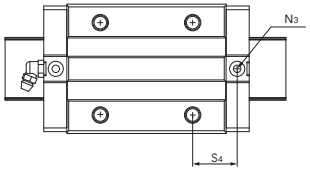
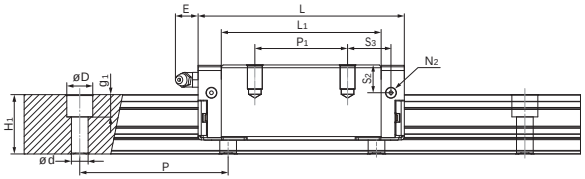
ARC-04-N31-EN

Dimensions Table







ARC MS Series

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)										Block Dimensions(mm)							Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
ARC 15 MS	24	9.5	15	15	60	7.5x4.5x5.3	34	41.2	26	20.7	-	26	M4x7	-	6	M3x6.5	M3x6	P3	3.5	4.5	7.5	15.6	16.7	7.7	12.1	100	50	50	106	1290	ARC 15 MS
ARC 20 MS	28	11	20	20	60	9.5x6x8.5	42	49.2	32.2	23	-	32	M5x7	-	8	M3x7.5	M3x5.5	P4	10	4	7.4	19.1	19.8	12.5	19.3	205	100	100	170	2280	ARC 20 MS
ARC 25 MS	33	12.5	23	23	60	11x7x9	48	57.4	38.4	27	-	35	M6x9	-	8	M6x7.5	M3x6.5	P4	12	5	9.3	22.2	23.2	18.2	27.3	350	160	160	300	3020	ARC 25 MS
ARC 30 MS	42	16	28	27	80	14x9x12	60	68	44	35.2	-	40	M8x10	-	12	M6x8.5	M6x5	P5	12	7.5	12	27	26.7	23.3	33.1	520	230	230	560	4380	ARC 30 MS

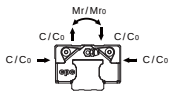
ARC MN Series

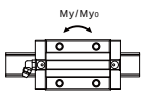
ARC 15 MN	24	9.5	15	15	60	7.5x4.5x5.3	34	55.5	40.3	20.7	26	26	M4x7	-	6	M3x6.5	M3x6	P3	3.5	4.5	7.5	9.8	10.9	9.9	17.5	140	105	105	158	1290	ARC 15 MN
ARC 20 MN	28	11	20	20	60	9.5x6x8.5	42	69	52	23	32	32	M5x7	-	8	M3x7.5	M3x5.5	P4	10	4	7.4	13	13.7	17.1	30.0	325	230	230	266	2280	ARC 20 MN
ARC 25 MN	33	12.5	23	23	60	11x7x9	48	81.2	62.2	27	35	35	M6x9	-	8	M6x7.5	M3x6.5	P4	12	5	9.3	16.6	17.6	24.8	42.5	540	385	385	420	3020	ARC 25 MN
ARC 30 MN	42	16	28	27	80	14x9x12	60	95.5	71.5	35.2	40	40	M8x10	-	12	M6x8.5	M6x5	P5	12	7.5	12	20.8	20.5	32.8	53.7	845	565	565	800	4380	ARC 30 MN
ARC 35 MN	48	18	34	32	80	14x9x12	70	111.2	86.2	40.4	50	50	M8x13	-	14	M6x10	M6x7	P5	12	8	15	23.4	24.1	45.9	82.9	1700	1080	1080	1120	6790	ARC 35 MN
ARC 45 MN	60	20.5	45	39	105	20x14x17	86	135.5	102.5	50.7	60	60	M10x17	-	14	PT1/8x12.5	M6x10.5	P5	14	11.1	18.1	27.3	27.2	71.3	122.1	3200	1910	1910	2120	10530	ARC 45 MN
* ARC 55 MN	70	23.5	53	46	120	20x16x18	100	155.6	118.6	58	75	75	M12x20	-	16	PT1/8x14.5	M6x12.5	P5	14	12	19.5	28.5	29.5	103.4	173.1	5030	3120	3120	3880	14060	ARC 55 MN

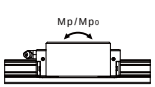
ARC ML Series

ARC 15 ML	24	9.5	15	15	60	7.5x4.5x5.3	34	76.2	61	20.7	34	26	M4x7	-	6	M3x6.5	M3x6	P3	3.5	4.5	7.5	16.1	17.2	13.4	26.9	215	235	235	240	1290	ARC 15 ML
ARC 20 ML	28	11	20	20	60	9.5x6x8.5	42	87.2	70.2	23	45	32	M5x7	-	8	M3x7.5	M3x5.5	P4	10	4	7.4	15.6	16.3	20.4	38.5	415	390	390	330	2280	ARC 20 ML
ARC 30 ML	42	16	28	27	80	14x9x12	60	118	94	35.2	60	40	M8x10	-	12	M6x8.5	M6x5	P5	12	8.7	12	21.7	21.7	39.6	70.2	1105	950	950	1138	4380	ARC 30 ML
ARC 35 ML	48	18	34	32	80	14x9x12	70	136.6	111.6	40.4	72	50	M8x13	-	14	M6x10	M6x7	P5	12	8	15	25.1	25.8	54.7	106.5	2185	1755	1755	1536	6790	ARC 35 ML
ARC 45 ML	60	20.5	45	39	105	20x14x17	86	171.5	138.5	50.7	80	60	M10x17	-	14	PT1/8x12.5	M6x10.5	P5	14	11.1	18.1	35	35	89.5	169.1	4430	3460	3460	3160	10530	ARC 45 ML
* ARC 55 ML	70	23.5	53	46	120	20x16x18	100	202.5	165.5	58	95	75	M12x20	-	16	PT1/8x14.5	M6x12.5	P5	14	12	19.5	42	43	129.9	239.7	6965	5855	5855	4800	14060	ARC 55 ML

1. The model is in design
2. The load capacities is for full-ball type (without ball chain)
3. N_2 = Injecting holes
4. N_3 = O-ring size for lubrication from above
5. N_2 .N_3 will be seal before shipmant, open it when using product.

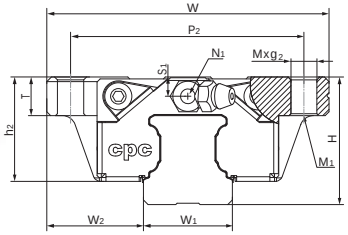


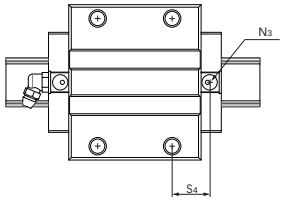


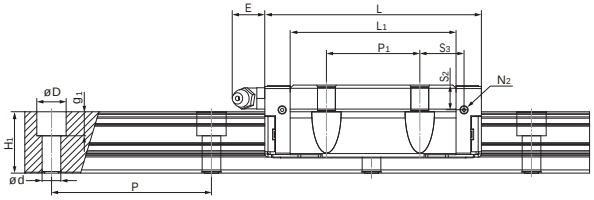


The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table







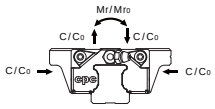
ARC FS Series

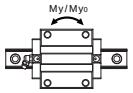
Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)										Block Dimensions(mm)							Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
ARC 15 FS	24	18.5	15	15	60	7.5x4.5x5.3	52	41.2	26	20.7	-	41	M5x7	M4	7	M3x6.5	M3x6	P3	3.5	4.5	7.5	15.6	16.7	7.7	12.1	100	50	50	132	1290	ARC 15 FS
ARC 20 FS	28	19.5	20	20	60	9.5x6x8.5	59	49.2	32.2	23	-	49	M6x10	M5	10	M3x7.5	M3x5.5	P4	10	4	7.4	19.1	19.8	12.5	19.3	205	100	100	210	2280	ARC 20 FS
ARC 25 FS	33	25	23	23	60	11x7x9	73	57.4	38.4	27	-	60	M8x12	M6	12	M6x7.5	M3x6.5	P4	12	5	9.3	22.2	23.2	18.2	27.3	350	160	160	345	3020	ARC 25 FS
* ARC 30 FS	42	31	28	27	80	14x9x12	90	68	44	35.2	-	72	M10x15	M8	15	M6x8.5	M6x5	P5	12	7.5	12	27	26.8	23.3	33.1	520	230	230	750	4380	ARC 30 FS

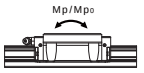
ARC FN Series

ARC 15 FN	24	18.5	15	15	60	7.5x4.5x5.3	52	55.5	40.3	20.7	26	41	M5x7	M4	7	M3x6.5	M3x6	P3	3.5	4.5	7.5	8.9	10.9	9.9	17.5	140	105	105	200	1290	ARC 15 FN
ARC 20 FN	28	19.5	20	20	60	9.5x6x8.5	59	69	52	23	32	49	M6x10	M5	10	M3x7.5	M3x5.5	P4	10	4	7.4	13	13.7	17.1	30.0	325	230	230	336	2280	ARC 20 FN
ARC 25 FN	33	25	23	23	60	11x7x9	73	81.2	62.2	27	35	60	M8x12	M6	12	M6x7.5	M3x6.5	P4	12	5	9.3	16.6	17.6	24.8	42.5	540	385	385	524	3020	ARC 25 FN
ARC 30 FN	42	31	28	27	80	14x9x12	90	95.5	71.5	35.2	40	72	M10x15	M8	15	M6x8.5	M6x5	P5	12	7.5	12	20.8	20.5	32.8	53.7	845	565	565	1200	4380	ARC 30 FN
ARC 35 FN	48	33	34	32	80	14x9x12	100	111.2	86.2	40.4	50	82	M10x15	M8	15	M6x10	M6x7	P5	12	8	15	23.4	24.1	45.9	82.9	1700	1080	1080	1580	6790	ARC 35 FN

1. The model is in design
2. The load capacities is for full-ball type (without ball chain)
3. N_2 = Injecting holes
4. N_3 = O-ring size for lubrication from above
5. N_2.N_3 will be seal before shipmant, open it when using product.

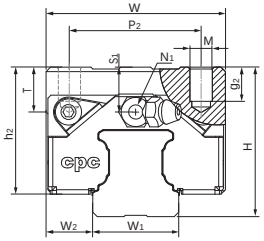


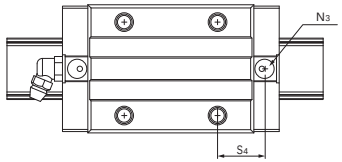


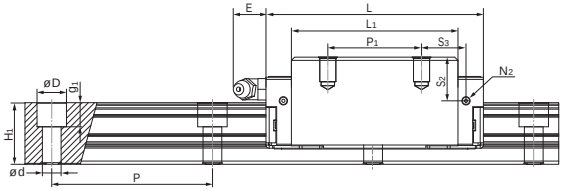


The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table







HRC MN Series

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)										Block Dimensions(mm)							Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
HRC 15 MN	28	9.5	15	15	60	7.5x4.5x5.3	34	55.5	40.3	24.7	26	26	M4x7	-	6	M3x6.5	M3x6	P3	3.5	8.5	11.5	9.8	10.9	9.9	17.5	140	105	105	200	1290	HRC 15 MN
HRC 20 MN	30	12	20	20	60	9.5x6x8.5	44	69	52	25	36	32	M5x8.5	-	8	M3x7.5	M3x5.5	P4	10	6	9.4	11	11.7	17.1	30.0	325	230	230	318	2280	HRC 20 MN
HRC 25 MN	40	12.5	23	23	60	11x7x9	48	81.2	62.2	34	35	35	M6x9	-	12	M6x7.5	M3x6.5	P4	12	12	16.3	16.6	17.6	24.8	42.5	540	385	385	578	3020	HRC 25 MN
HRC 30 MN	45	16	28	27	80	14x9x12	60	95.5	71.5	38.4	40	40	M8x12	-	12	M6x8.5	M6x5	P5	12	10.5	15	20.8	20.5	32.8	53.7	845	565	565	896	4380	HRC 30 MN
HRC 35 MN	55	18	34	32	80	14x9x12	70	111.2	86.2	47.4	50	50	M8x13	-	14	M6x10	M6x7	P5	12	15	22	23.4	24.1	45.9	82.9	1700	1080	1080	1430	6790	HRC 35 MN
HRC 45 MN	70	20.5	45	39	105	20x14x17	86	135.5	102.5	60.7	60	60	M10x20	-	14	PT1/8x12.5	M6x10.5	P5	14	21.1	28.1	27.3	27.3	71.3	122.1	3200	1910	1910	2794	10530	HRC 45 MN
* HRC 55 MN	80	23.5	53	46	120	24x16x18	100	155.6	118.6	68	75	75	M12x24	-	16	PT1/8x14.5	M6x12.5	P5	14	22	29.5	28.5	29.5	103.4	173.1	5030	3120	3120	4780	14060	HRC 55 MN

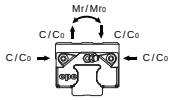
HRC ML Series

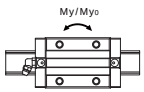
HRC 15 ML	28	9.5	15	15	60	7.5x4.5x5.3	34	76.2	61	24.7	26	26	M4x7	-	6	M3x6.5	M3x6	P3	3.5	8.5	11.5	20.1	21.2	13.4	26.9	215	235	235	300	1290	HRC 15 ML
HRC 20 ML	30	12	20	20	60	9.5x6x8.5	44	87.2	70.2	25	50	32	M5x8.5	-	8	M3x7.5	M3x5.5	P4	10	6	9.4	13.1	13.8	20.4	38.5	415	390	390	400	2280	HRC 20 ML
HRC 25 ML	40	12.5	23	23	60	11x7x9	48	105	86	34	50	35	M6x9	-	12	M6x7.5	M3x6.5	P4	12	12	16.3	21	22	30.7	57.7	735	710	710	685	3020	HRC 25 ML
HRC 30 ML	45	16	28	27	80	14x9x12	60	118	94	38.4	60	40	M8x12	-	12	M6x8.5	M6x5	P5	12	10.5	15	21.7	21.8	39.6	70.2	1105	950	950	1150	4380	HRC 30 ML
HRC 35 ML	55	18	34	32	80	14x9x12	70	136.6	111.6	47.4	72	50	M8x13	-	14	M6x10	M6x7	P5	12	15	22	25.1	25.8	54.7	106.5	2185	1755	1755	1953	6790	HRC 35 ML
HRC 45 ML	70	20.5	45	39	105	20x14x17	86	171.5	138.5	60.7	80	60	M10x20	-	14	PT1/8x12.5	M6x10.5	P5	14	21.1	28.1	35	35	89.5	169.1	4430	3460	3460	4060	10530	HRC 45 ML
* HRC 55 ML	80	23.5	53	46	120	24x16x18	100	202.5	165.5	68	95	75	M12x24	-	16	PT1/8x14.5	M6x12.5	P5	14	22	29.5	42	43	129.9	239.7	6965	5855	5855	6060	14060	HRC 55 ML

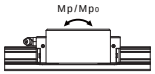
ERC Series

ERC 25 MS	36	12.5	23	23	60	11x7x9	48	57.4	38.4	30	-	35	M6x9	-	8	M6x7.5	M3x6.5	P4	12	8	12.3	22.2	23.2	18.2	27.3	350	160	160	315	3020	ERC 25 MS
ERC 25 MN	36	12.5	23	23	60	11x7x9	48	81.2	62.2	30	35	35	M6x9	-	8	M6x7.5	M3x6.5	P4	12	8	12.3	16.6	17.6	24.8	42.5	540	385	385	470	3020	ERC 25 MN
ERC 25 ML	36	12.5	23	23	60	11x7x9	48	105	86	30	50	35	M6x9	-	8	M6x7.5	M3x6.5	P4	12	8	12.3	21	22	30.7	57.7	735	710	710	610	3020	ERC 25 ML

1. The model is in design
2. The load capacities is for full-ball type (without ball chain)
3. N_2 = Injecting holes
4. N_3 = O-ring size for lubrication from above
5. N_2 .N_3 will be seal before shipmant, open it when using product.

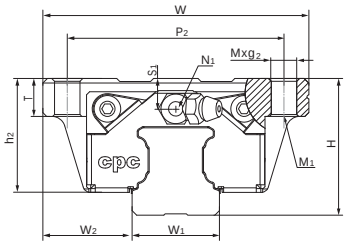


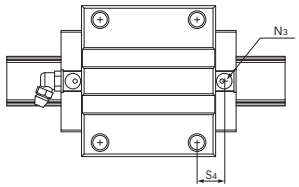


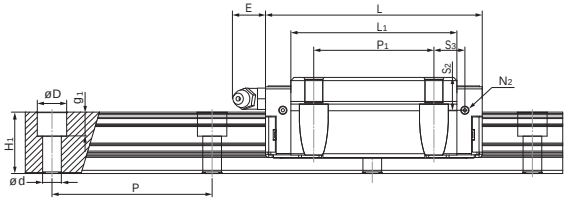


The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

Dimensions Table







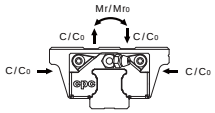
HRC FN Series

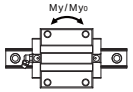
Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)										Block Dimensions(mm)							Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
HRC 15 FN	24	16	15	15	60	7.5x4.5x5.3	47	55.5	40.3	20.7	30	38	M5x7	M4	7	M3x6.5	M3x6	P3	3.5	4.5	7.5	7.8	8.9	9.9	17.5	140	105	105	190	1290	HRC 15 FN
HRC 20 FN	30	21.5	20	20	60	9.5x6x8.5	63	69	52	25	40	53	M6x10	M5	10	M3x7.5	M3x5.5	P4	10	6	9.4	9	9.7	17.1	30.0	325	230	230	396	2280	HRC 20 FN
HRC 25 FN	36	23.5	23	23	60	11x7x9	70	81.2	62.2	30	45	57	M8x12	M6	12	M6x7.5	M3x6.5	P4	12	8	12.3	11.6	12.6	24.8	42.5	540	385	385	626	3020	HRC 25 FN
HRC 30 FN	42	31	28	27	80	14x9x12	90	95.5	71.5	35.2	52	72	M10x15	M8	16	M6x8.5	M6x5	P5	12	7.5	12	14.8	14.5	32.8	53.7	845	565	565	1110	4380	HRC 30 FN
HRC 35 FN	48	33	34	32	80	14x9x12	100	111.2	86.2	40.4	62	82	M10x15	M8	16	M6x10	M6x7	P5	12	8	15	17.4	18.1	45.9	82.9	1700	1080	1080	1550	6790	HRC 35 FN
HRC 45 FN	60	37.5	45	39	105	20x14x17	120	135.5	102.5	50.7	80	100	M12x18	M10	19	PT1/8x12.5	M6x10.5	P5	14	11.1	18.1	17.3	17.3	71.3	122.1	3200	1910	1910	2747	10530	HRC 45 FN
* HRC 55 FN	70	43.5	53	46	120	24x16x18	140	155.6	118.6	58	95	116	M14x20	M12	20	PT1/8x14.5	M6x12.5	P5	14	12	19.5	28.5	29.5	103.4	173.1	5030	3120	3120	5260	14060	HRC 55 FN

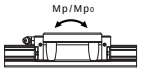
HRC FL Series

HRC 20 FL	30	21.5	20	20	60	9.5x6x8.5	63	87.2	70.2	25	40	53	M6x10	M5	10	M3x7.5	M3x5.5	P4	10	6	9.4	18.1	18.8	20.4	38.5	415	390	390	504	2280	HRC 20 FL
HRC 25 FL	36	23.5	23	23	60	11x7x9	70	105	86	30	45	57	M8x12	M6	12	M6x7.5	M3x6.5	P4	12	8	12.3	23.5	24.5	30.7	57.7	735	710	710	870	3020	HRC 25 FL
HRC 30 FL	42	31	28	27	80	14x9x12	90	118	94	35.2	52	72	M10x15	M8	16	M6x8.5	M6x5	P5	12	7.5	12	25.7	25.8	39.6	70.2	1105	950	950	1385	4380	HRC 30 FL
HRC 35 FL	48	33	34	32	80	14x9x12	100	136.6	111.6	40.4	62	82	M10x15	M8	16	M6x10	M6x7	P5	12	8	15	30.1	30.8	54.7	106.5	2185	1755	1755	2000	6790	HRC 35 FL
HRC 45 FL	60	37.5	45	39	105	20x14x17	120	171.5	138.5	50.7	80	100	M12x18	M10	19	PT1/8x12.5	M6x10.5	P5	14	11.1	18.1	35	35	89.5	169.1	4430	3460	3460	4280	10530	HRC 45 FL
* HRC 55 FL	70	43.5	53	46	120	24x16x18	140	202.5	165.5	58	95	116	M14x20	M12	20	PT1/8x14.5	M6x12.5	P5	14	12	19.5	42	43	129.9	239.7	6965	5855	5855	7480	14060	HRC 55 FL

1. The model is in design
2. The load capacities is for full-ball type (without ball chain)
3. N_2 = Injecting holes
4. N_3 = O-ring size for lubrication from above
5. N_2 .N_3 will be seal before shipmant, open it when using product.







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Product Overview

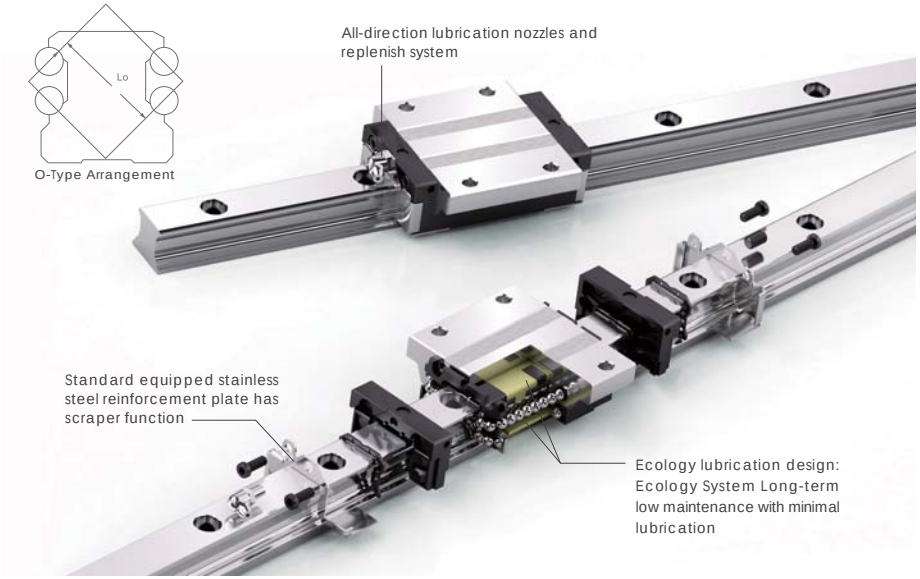
AR/HR/ER Lightweight Linear Guide Product Characteristics

cpc lightweight Ball Type Linear Guide Series adopt the O-type arrangement for the four row ball circulation design featuring high load and high stiffness. The contact angle between the rail and the ball is 45 degrees and realizes the 4 directions equal load capacity.

Among the AR/HR/ER Lightweight Linear Guide, two of the four circulation channels are positioned within the plastic accessories, reducing 10~20% of the block weight.

Stainless steel reinforcement plate has scraper function and the L design fastens the screws onto the top and bottom of the runner block, which reinforces the rigidity of end caps and cladding; further enables the high speed movement of products. AR/HR/ER Lightweight Linear Guide mainly provide the preload class VC and V0 etc. to enhance the tolerance of dimension and convenience of customers' processed components and even reduce the cost of manufacturing work.

- Tolerance of velocity
- Four directions equal load capacity
- Adopting the same rail with ARC/HRC/ERC
- Lightweight block rotary hole design
- Processed accessories match tolerance of dimension
- Available for vertical (downward) and reverse (upward) bolting track rail



- Available for special surface treatment
- Excellent dynamic performance: Reach Vmax > 5m/s Reach amax > 300m/s²
- Dust protection of double wipe blade design in the end seal; have Standard type and reinforcement type

Technical information

Accuracy

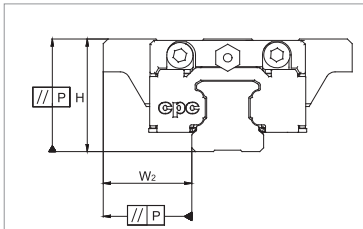


Table of accuracy

Accuracy grades (μm)		H	N
Tolerance of dimension height H	H	±40	±100
Variation of height for different runner Block on the same position of Rail	ΔH	15	30
Tolerance of dimension width W2	W2	±20	±40
Variation of width for different runner Block on the same position of Rail	ΔW2	15	30

Please refer to P13 : Accuracy of the running parallelism graph

Preload and clerance

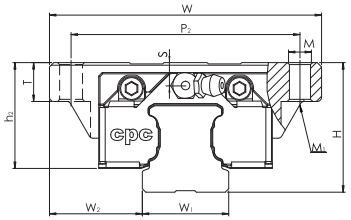
AR/HR/ER						
Class	Description	Preload Value	Clearance (μm)			Application
			15	20	25	
VC	Clearance	0	+10~+2	+10~+2	+11~+3	Smooth motion, low friction
V0	Light preload	0.02C	+2~-4	+2~-5	+3~-6	For precision situations, smooth motion

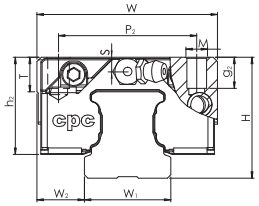
Ordering information

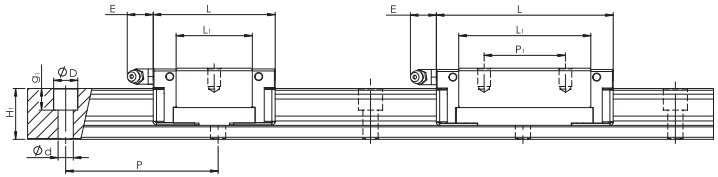
AR	U	15	M	N	B	2	Z	V0	H	-1480L	-20	-20	II	/J

- /J: Customization code (Please refer to P14)
- II: Number of rails on the same moving axis
- -20: End hole pitch (mm)
- -20: Starting hole pitch (mm)
- -1480L: Rail length (mm)
- H: Accuracy grade : H, N
- V0: Preload class : VC, V0
- Z: with lubrication storage pad
- 2: Block quantity
- B: Seal type : B: Low friction S: Standard
- N: Block length : L: long N: standard S: short
- M: Block width : M: standard F: flanged
- 15: Block type : 15, 20, 25
- U: rail (tapped from the botton)
- AR: Product type : AR: automation series HR/ER: heavy load series

Dimensions Table

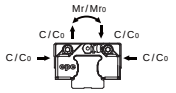


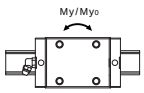


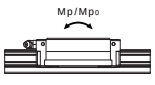


AR Series

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)							Block Dimensions(mm)				Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P2	E	Mxg2	M1	S	T	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
AR 15 MS	24	9.5	15	15	60	7.5x4.5x5.3	34	40.8	24.2	20.1	-	26	4.5	M4x7	-	4	6	6.40	10.8	80	40	40	95	1290	AR 15 MS
AR 15 MN	24	9.5	15	15	60		34	56.1	39.5	20.1	26	26	4.5	M4x7	-	4	6	9.0	17.5	140	100	100	140		AR 15 MN
AR 15 FS	24	18.5	15	15	60		52	40.8	24.2	20.1	-	41	4.5	M5x7	M4	4	7	6.4	10.8	80	40	40	120		AR 15 FS
AR 15 FN	24	18.5	15	15	60		52	56.1	39.5	20.1	26	41	4.5	M5x7	M4	4	7	9.0	17.5	140	100	100	180		AR 15 FN
AR 20 MS	28	11	20	20	60	9.5x6x8.5	42	48.2	30	22.5	-	32	12	M5x7	-	3.5	8	10.9	16.3	170	80	80	148	2280	AR 20 MS
AR 20 MN	28	11	20	20	60		42	70.2	52	22.5	32	32	12	M5x7	-	3.5	8	15.6	29.8	310	220	220	260		AR 20 MN
AR 20 FS	28	19.5	20	20	60		59	48.2	30	22.5	-	49	12	M6x9	M5	3.5	9	10.9	16.3	170	80	80	185		AR 20 FS
AR 20 FN	28	19.5	20	20	60		59	70.2	52	22.5	32	49	12	M6x9	M5	3.5	9	15.6	29.8	310	220	220	299		AR 20 FN
AR 25 MS	33	12.5	23	23	60	11x7x9	48	57.2	37	26.6	-	35	12	M6x9	-	5	8	12.3	21.2	220	110	110	285	3020	AR 25 MS
AR 25 MN	33	12.5	23	23	60		48	80.2	60	26.6	35	35	12	M6x9	-	5	8	18.8	36.4	410	300	300	380		AR 25 MN
AR 25 FS	33	25	23	23	60		73	57.2	37	26.6	-	60	12	M8x10	M6	5	10	12.3	21.2	220	110	110	325		AR 25 FS
AR 25 FN	33	25	23	23	60		73	80.2	60	26.6	35	60	12	M8x10	M6	5	10	18.8	36.4	410	300	300	440		AR 25 FN







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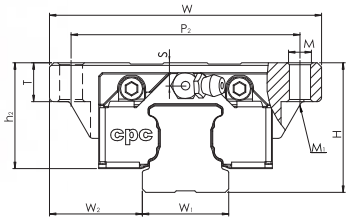
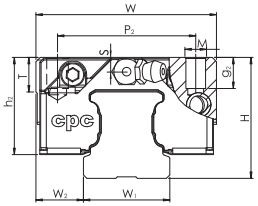
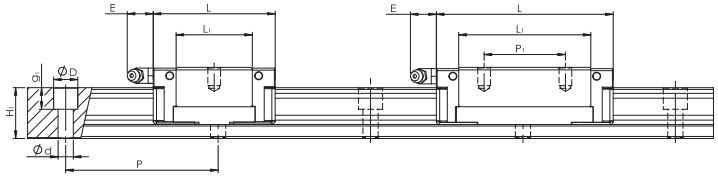
Dimensions Table





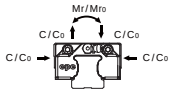


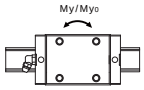
HR Series

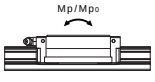
Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)							Block Dimensions(mm)				Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
	H	W2	W1	H1	P	D x d x g1	W	L	L1	h2	P1	P2	E	M x g2	M1	S	T	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
HR 15 FN	24	16	15	15	60	7.5x4.5x5.3	47	56.1	39.5	20.1	30	38	4.5	M5x7	-	4	7	9.0	17.5	140	100	100	180	1290	HR 15 FN
HR 20 MN	30	12	20	20	60	9.5x6x8.5	44	70.2	52	24.5	36	32	12	M5x8.5	-	5.5	10	15.6	29.8	310	220	220	310	2280	HR 20 MN
HR 20 ML	30	12	20	20	60		44	90.2	72	24.5	50	32	12	M5x8.5	-	5.5	10	20.8	43.3	430	420	420	383		HR 20 ML
HR 20 FN	30	21.5	20	20	60		63	70.2	52	24.5	40	53	12	M6x9	M5	5.5	9	15.6	29.8	310	220	220	385		HR 20 FN
HR 20 FL	30	21.5	20	20	60		63	90.2	72	24.5	40	53	12	M6x9	M5	5.5	9	20.8	43.3	430	420	420	496		HR 20 FL
HR 25 MN	40	12.5	23	23	60	11x7x9	48	80.2	60	33.6	35	35	12	M6x9	-	12	12	18.8	36.4	410	300	300	530	3020	HR 25 MN
HR 25 ML	40	12.5	23	23	60		48	100.2	80	33.6	50	35	12	M6x9	-	12	12	23.4	48.5	560	520	520	665		HR 25 ML
HR 25 FN	36	23.5	23	23	60		70	80.2	60	29.6	45	57	12	M8x10	M6	8	10	18.8	36.4	410	300	300	470		HR 25 FN
HR 25 FL	36	23.5	23	23	60		70	100.2	80	29.6	45	57	12	M8x10	M6	8	10	23.4	48.5	560	520	520	585		HR 25 FL

ER Series

ER 25 MN	36	12.5	23	23	60	11x7x9	48	80.2	60	29.6	35	35	12	M6x9	-	8	8	18.8	36.4	410	300	300	432	3020	ER 25 MN
ER 25 ML	36	12.5	23	23	60		48	100.2	80	29.6	50	35	12	M6x9	-	8	8	23.4	48.5	560	520	520	550		ER 25 ML







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WRC Wide Rail Ball Type Linear Guide Series

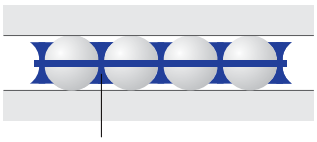
WRC Product Feature

The cpc WRC Linear Guide Series has a wide rail which can absorb larger torque from Mr direction. With the O-type arrangement for the four row ball circulation design, the contact angle between the rail and ball is 45 degrees which can realize the 4 directional load effects. In addition, the runner block for the same size uses larger and more balls, so will outperform competitor's models by 10% to 30% regarding load capabilities. The products have characteristics of high load, high moment, and high rigidity.

Low-noise, high-quality, and high-speed patent ball chain

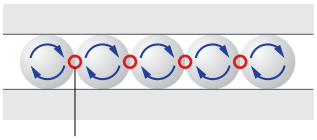
WRC ball chain patent design provides large contact area between ball which can provide better maintenance of oil film; achieve low noise; balls can operate with higher speed; extend the product service life.

Low noise ball chain



The contact point is between balls and ball chain, so the surface pressure is low.

Traditional Ball type linear guide

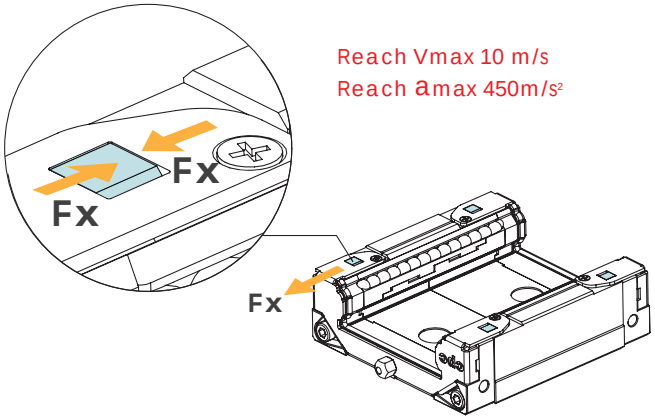


The Ball type linear guide's contact point is only between balls, thus the surface pressure is high.

Reinforcement plate patent design

Using 2 stainless steel reinforcement plates, the L type design can fasten the screws onto the top and bottom of the runner block, reinforcing the rigidity of the end caps and cladding.

The WRC type uses the stainless steel reinforcement plates to strengthen the bottom latches, while increasing X-axis direction force capacity, and increasing operation speed.



Reach Vmax 10 m/s

Reach amax 450m/s²

Dustproof design

Stainless Steel Reinforcement Plate

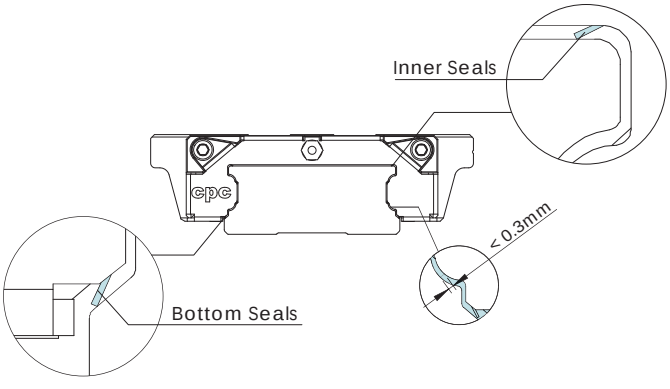
With clearance between rail profile for less than 0.3mm, the place can scrape large items such as iron filings to protect the end seals.

Inner Seals

The inner seals can protect foreign objects from sliding into the rails while maintaining low friction. It can also allow the lubrication oil to be maintained inside the runner block and prolong the re-lubrication interval.

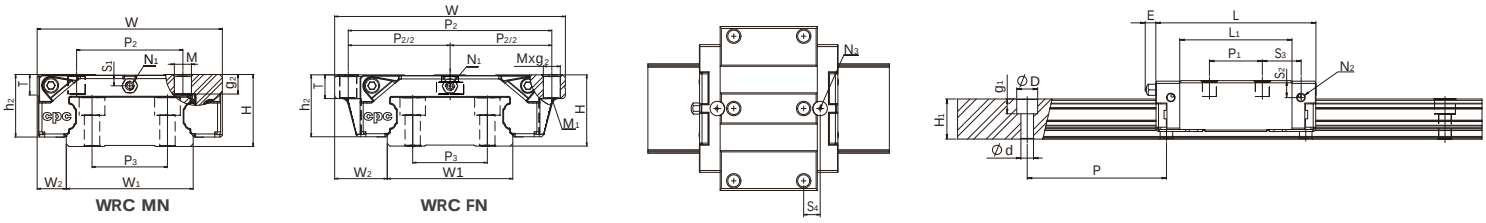
Bottom Seals

The bottom seals can prevent foreign objects from entering the bottom and prevent lubrication from leaking out. With full sealing design, it reduces the amount of oil usage, prolong the re-lubrication interval, and prolong the service life.



WRC Wide Rail Ball Type Linear Guide Series

Dimension Table

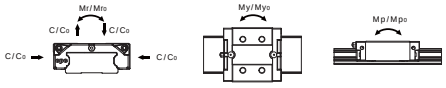


WRC Series

Model Code	Mounting Dimensions		Rail Dimensions (mm)					Block Dimensions (mm)																	Load Capacities (KN)			Static Moment (Nm)			Weight	
	H	W2	W1	H1	P	P3	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	Ciso 100km	Ciso 50km	Co	Mro	Mpo	Myo	Block(g)	Rail(g/m)
WRC 21/15 MN	21	8.5	37	14.4	50	22	7.5x4.5x5.3	54	57.5	40.3	18.3	19	31	M5x5	-	6	M3	M3x3	P3	3.5	3.3	6.05	13.9	11.9	9.9	12.5	17.5	315	105	105	160	3596
WRC 21/15 FN	21	15.5	37	14.4	50	22	7.5x4.5x5.3	68	57.5	40.3	18.3	29	60	M5x5	M4	6	M3	M3x3	P3	3.5	3.3	6.05	8.9	6.9	9.9	12.5	17.5	315	105	105	198	3596
WRC 27/20 MN	27	10	42	18.5	60	24	7.5x4.5x5.3	62	70	52	23.5	32	46	M6x6	-	10	M3	M3x4	P4	3.5	4.5	8	13.2	11.5	17.1	21.5	30	634	230	230	320	5259
WRC 27/20 FN	27	19	42	18.5	60	24	7.5x4.5x5.3	80	70	52	23.5	40	70	M6x9	M4	9	M3	M3x4	P4	3.5	4.5	8	9.2	7.5	17.1	21.5	30	634	230	230	553	5259

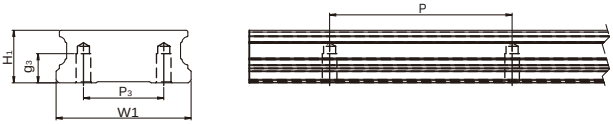
WRC...C Series (Ball chain type)

Model Code	Mounting Dimensions		Rail Dimensions (mm)					Block Dimensions (mm)																	Load Capacities (KN)			Static Moment (Nm)			Weight	
	H	W2	W1	H1	P	P3	Dxdxg1	W	L	L1	h2	P1	P2	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	Ccage 100km	Ccage 50km	Co	Mro	Mpo	Myo	Block(g)	Rail(g/m)
WRC 21/15 MN	21	8.5	37	14.4	50	22	7.5x4.5x5.3	54	57.5	40.3	18.3	19	31	M5x5	-	6	M3	M3x3	P3	3.5	3.3	6.05	13.9	11.9	11.8	14.9	16.2	295	95	95	159	3596
WRC 21/15 FN	21	15.5	37	14.4	50	22	7.5x4.5x5.3	68	57.5	40.3	18.3	29	60	M5x5	M4	6	M3	M3x3	P3	3.5	3.3	6.05	8.9	6.9	11.8	14.9	16.2	295	95	95	197.5	3596
WRC 27/20 MN	27	10	42	18.5	60	24	7.5x4.5x5.3	62	70	52	23.5	32	46	M6x6	-	10	M3	M3x4	P4	3.5	4.5	8	13.2	11.5	22.3	28.1	25.7	535	200	200	318	5259
WRC 27/20 FN	27	19	42	18.5	60	24	7.5x4.5x5.3	80	70	52	23.5	40	70	M6x9	M4	9	M3	M3x4	P4	3.5	4.5	8	9.2	7.5	22.3	28.1	25.7	535	200	200	550	5259



The above rating load capacities and static moment are calculated according to ISO14728 standard. The rating life for basic dynamic load rating is defined as the total 100km travel distance that 90% of a group of identical linear guides can be operated individually under the same conditions free from any material damage caused by rolling fatigue. When the standard of 50km travel distance is applied, the above basic dynamic load rating C of ISO 14728 should be multiplied by 1.26 for conversion.

WRU Series (Tapped from the bottom)



Model Code	W1	H1	P	P3	Mxg3	Lmax	Rail(g/m)
WRU 21/15	37	14.4	50	22	M4x8	4000	3596
WRU 27/20	42	18.5	60	24	M5x7.5	4000	5259

Ordering information

Model code

WRC	U	21/15	M	N	B	2	C	V1	P	-1480L	-15	-15	II	/J

- /J: Customization code
- II: Number of rails on the same moving axis
- -15: End hole pitch (mm)
- -15: Starting hole pitch (mm)
- -1480L: Rail length (mm)
- P: Accuracy grade : UP, SP, P, H, N
- V1: Preload class : VC, V0, V1, V2
- C: with ball chain
- 2: Block quantity
- B: Seal type : B: Low friction
- N: Block length : N: standard
- M: Block width : M: standard F: flanged
- 21/15: Block type : 21/15 , 27/20
- U : rail (Tapped from the bottom)
- WRC: Product type : WRC: Wide Rail Ball Type Linear Guide Series

* cpc reserves the right to revise any information(technical details) any time without notice, for printing mistakes or any other incidental mistakes. We take no responsibility.

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ARC-07-O91-EN

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MR Miniature Linear Guide Series
ST Miniature Stroke Slide Series

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MR-02-O61-EN

cpc CHIEFTEK PRECISION CO., LTD.

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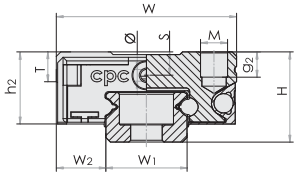
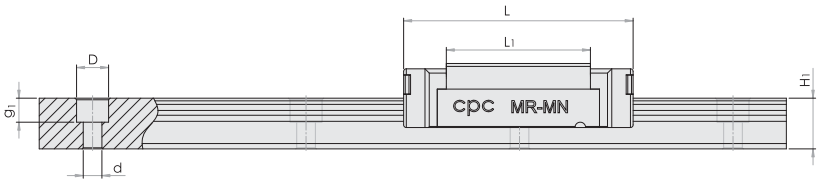
MR-02-O61-EN

MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

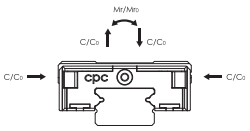
5.1 MR-M SU Series (End seal , Bottom Seal)
MR-M ZU Series (End seal , Bottom Seal , Lubrication Storage)

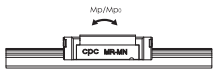


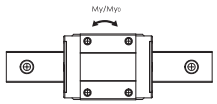


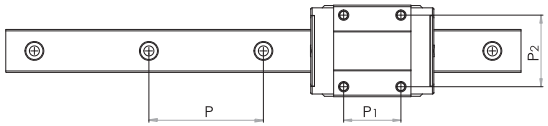
Model Code	Fabricate Dimensions		Rail Dimension(mm)				Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W_2	W_1	H_1	P	Dxdxg1	W	L	L_1	h_2	P_1	P_2	Mxg2	Ø	S	T	C_{100B}(dyn)	C_0(stat)	Mr_0	Mp_0	My_0	Block(g)	Rail(g/m)	
MR 15ML SU/ZU	16	8.5	15	9.5	40	6x3.5x4.5	32	60	44	12.3	25	25	M3x5.5	1.8	3.3	4.3	5350	9080	70	63.3	63.3	90	930	MR 15ML SU/ZU
MR 15MN SU/ZU	16	8.5	15	9.5	40	6x3.5x4.5	32	43	27	12.3	20	25	M3x5.5	1.8	3.3	4.3	3810	5590	43.6	27	27	61	930	MR 15MN SU/ZU
MR 12ML SU/ZU	13	7.5	12	7.5	25	6x3.5x4.5	27	47.6	34	10.2	20	20	M3x3.5	1.3	3.2	4.3	3240	5630	34.9	30.2	30.2	51	602	MR 12ML SU/ZU
MR 12MN SU/ZU	13	7.5	12	7.5	25	6x3.5x4.5	27	35.4	22	10.2	15	20	M3x3.5	1.3	3.2	4.3	2308	3465	21.5	12.9	12.9	34	602	MR 12MN SU/ZU
MR 9ML SU/ZU	10	5.5	9	5.5	20	6x3.5x3.5	20	40.9	30.8	8	16	15	M3x3.0	1.3	2.2	3.3	2135	3880	18.2	12.4	12.4	28	301	MR 9ML SU/ZU
MR 9MN SU/ZU	10	5.5	9	5.5	20	6x3.5x3.5	20	30.6	20.5	8	10	15	M3x3.0	1.3	2.2	3.3	1570	2495	11.7	6.4	6.4	18	301	MR 9MN SU/ZU
MR 7ML SU/ZU	8	5	7	4.7	15	4.2x2.4x2.3	17	31.2	21.8	6.7	13	12	M2x2.5	1.1	1.6	2.8	1310	2440	9	7.7	7.7	14	215	MR 7ML SU/ZU
MR 7MN SU/ZU	8	5	7	4.7	15	4.2x2.4x2.3	17	23.7	14.3	6.7	8	12	M2x2.5	1.1	1.6	2.8	890	1440	5.2	3.3	3.3	8	215	MR 7MN SU/ZU
MR 5ML SU/ZU	6	3.5	5	3.5	15	3.5x2.4x1	12	19.6	13.5	4.6	7	-	M2.6x2.0	0.7	1.3	2	470	900	2.4	2.1	2.1	4	116	MR 5ML SU/ZU
MR 5MN SU/ZU	6	3.5	5	3.5	15	3.5x2.4x1	12	16	10	4.6	-	8	M2x1.5	0.7	1.3	2	335	550	1.7	1	1	3.5	116	MR 5MN SU/ZU
* MRU 3ML SU/ZU	4	2.5	3	2.6	10	M1.6	8	16	11	3.1	5.5	-	M2x1.1	0.3	0.7	1.5	295	575	0.9	1.1	1.1	1.2	53	MRU 3ML SU/ZU
* MRU 3MN SU/ZU	4	2.5	3	2.6	10	M1.6	8	11.7	6.7	3.1	3.5	-	M1.6x1.1	0.3	0.7	1.5	190	310	0.6	0.4	0.4	0.9	53	MRU 3MN SU/ZU

* Anticipated
Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: C_{50B}=1.26xC_{100B}





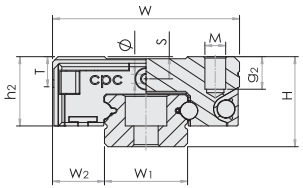


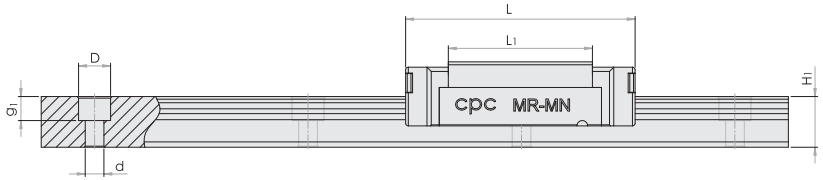


MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

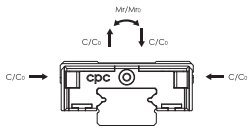
5.2 MR-M SS Series (End seal)
MR-M ZZ Series (End seal , Lubrication Storage)

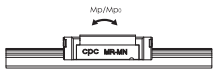


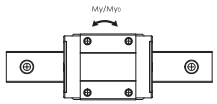


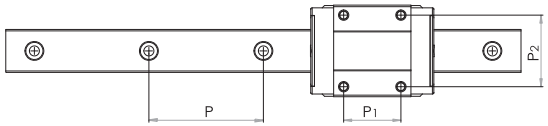
Model Code	Fabricate Dimensions		Rail Dimension(mm)				Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	D x d x g1	W	L	L1	h2	P1	P2	Mxg2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15ML SS/ZZ	16	8.5	15	9.5	40	6x3.5x4.5	32	60.1	44	12	25	25	M3x5.5	1.9	3.3	4.3	5350	9080	70	63.3	63.3	90	930	MR 15ML SS/ZZ
MR 15MN SS/ZZ	16	8.5	15	9.5	40	6x3.5x4.5	32	43.1	27	12	20	25	M3x5.5	1.9	3.3	4.3	3810	5590	43.6	27	27	61	930	MR 15MN SS/ZZ
MR 12ML SS/ZZ	13	7.5	12	7.5	25	6x3.5x4.5	27	47.6	34.1	10	20	20	M3x3.5	1.4	3.2	4.3	3240	5630	34.9	30.2	30.2	51	602	MR 12ML SS/ZZ
MR 12MN SS/ZZ	13	7.5	12	7.5	25	6x3.5x4.5	27	35.4	22	10	15	20	M3x3.5	1.4	3.2	4.3	2308	3465	21.5	12.9	12.9	34	602	MR 12MN SS/ZZ
MR 9ML SS/ZZ	10	5.5	9	5.5	20	6x3.5x3.5	20	41	30.8	7.8	16	15	M3x3.0	1.3	2.2	3.3	2135	3880	18.2	12.4	12.4	28	301	MR 9ML SS/ZZ
MR 9MN SS/ZZ	10	5.5	9	5.5	20	6x3.5x3.5	20	30.8	20.5	7.8	10	15	M3x3.0	1.3	2.2	3.3	1570	2495	11.7	6.4	6.4	18	301	MR 9MN SS/ZZ
MR 7ML SS/ZZ	8	5	7	4.7	15	4.2x2.4x2.3	17	31.5	21.8	6.5	13	12	M2x2.5	1.2	1.6	2.8	1310	2440	9	7.7	7.7	14	215	MR 7ML SS/ZZ
MR 7MN SS/ZZ	8	5	7	4.7	15	4.2x2.4x2.3	17	24	14.3	6.5	8	12	M2x2.5	1.2	1.6	2.8	890	1440	5.2	3.3	3.3	8	215	MR 7MN SS/ZZ
MR 5ML SS/ZZ	6	3.5	5	3.5	15	3.5x2.4x1	12	19.6	13.5	4.5	7	-	M2.6x2.0	0.7	1.3	2	470	900	2.4	2.1	2.1	4	116	MR 5ML SS/ZZ
MR 5MN SS/ZZ	6	3.5	5	3.5	15	3.5x2.4x1	12	16	10	4.5	-	8	M2x1.5	0.7	1.3	2	335	550	1.7	1	1	3.5	116	MR 5MN SS/ZZ
MRU 3ML SS	4	2.5	3	2.6	10	M1.6	8	16	11	3	5.5	-	M2x1.1	0.3	0.7	1.5	295	575	0.9	1.1	1.1	1.2	53	MRU 3ML SS
MRU 3MN SS	4	2.5	3	2.6	10	M1.6	8	11.7	6.8	3	3.5	-	M1.6x1.1	0.3	0.7	1.5	190	310	0.6	0.4	0.4	0.9	53	MRU 3MN SS

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





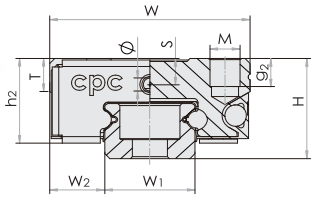


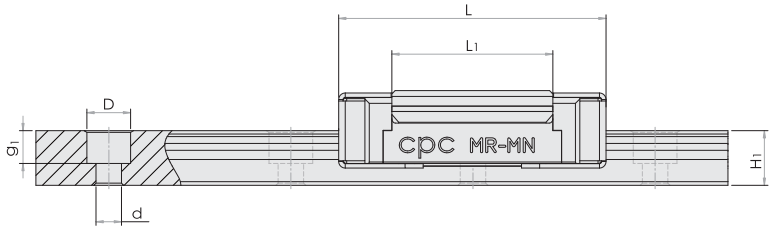


MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

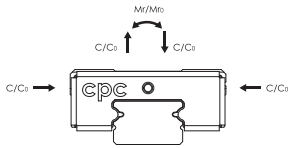
5.3 MR-M SUE Series (End seal, Bottom Seal, Reinforcement Plate)
MR-M ZUE Series (End seal, Bottom Seal , Reinforcement Plate , Lubrication Storage)

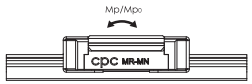


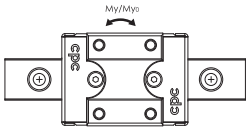


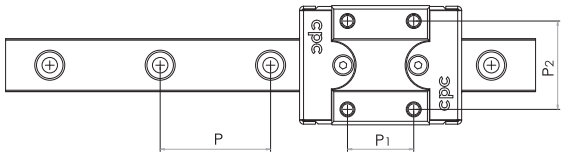
Model Code	Fabricate Dimensions		Rail Dimension(mm)				Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	D x d x g1	W	L	L1	h2	P1	P2	Mxg2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15ML SUE/ZUE	16	8.5	15	9.5	40	6x3.5x4.5	32	61.6	44	13.1	25	25	M3x5.5	1.8	3.3	4.3	5350	9080	70	63.3	63.3	90	930	MR 15ML SUE/ZUE
MR 15MN SUE/ZUE	16	8.5	15	9.5	40	6x3.5x4.5	32	44.6	27	13.1	20	25	M3x5.5	1.8	3.3	4.3	3810	5590	43.6	27	27	61	930	MR 15MN SUE/ZUE
MR 12ML SUE/ZUE	13	7.5	12	7.5	25	6x3.5x4.5	27	49	34	10.9	20	20	M3x3.5	1.3	3.2	4.3	3240	5630	34.9	30.2	30.2	51	602	MR 12ML SUE/ZUE
MR 12MN SUE/ZUE	13	7.5	12	7.5	25	6x3.5x4.5	27	36.8	22	10.9	15	20	M3x3.5	1.3	3.2	4.3	2308	3465	21.5	12.9	12.9	34	602	MR 12MN SUE/ZUE
MR 9ML SUE/ZUE	10	5.5	9	5.5	20	6x3.5x3.5	20	41.9	30.8	8.5	16	15	M3x3.0	1.3	2.2	3.3	2135	3880	18.2	12.4	12.4	28	301	MR 9ML SUE/ZUE
MR 9MN SUE/ZUE	10	5.5	9	5.5	20	6x3.5x3.5	20	31.6	20.5	8.5	10	15	M3x3.0	1.3	2.2	3.3	1570	2495	11.7	6.4	6.4	18	301	MR 9MN SUE/ZUE
MR 5ML SUE/ZUE	6	3.5	5	3.5	15	3.5x2.4x1	12	20.2	13.5	5.0	7	-	M2.6x2.0	0.7	1.3	2	470	900	2.4	2.1	2.1	4	116	MR 5ML SUE/ZUE
MR 5MN SUE/ZUE	6	3.5	5	3.5	15	3.5x2.4x1	12	16.6	10	5.0	-	8	M2x1.5	0.7	1.3	2	335	550	1.7	1	1	3.5	116	MR 5MN SUE/ZUE

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





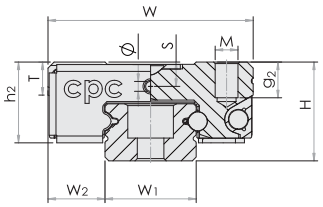


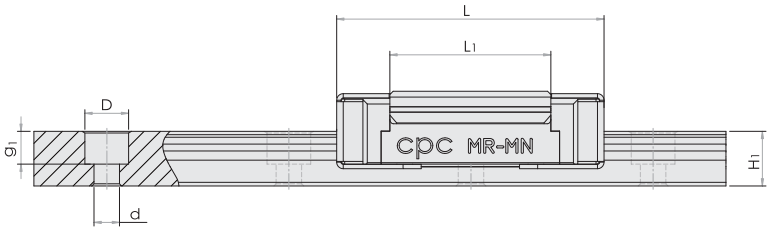


MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

5.4 MR-M EE Series (End seal, Reinforcement Plate)
MR-M EZ Series (End seal , Reinforcement Plate , Lubrication Storage)

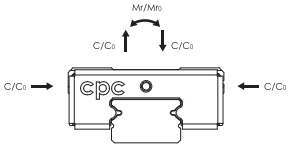


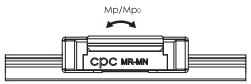


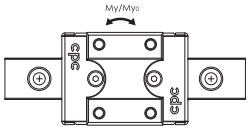
Model Code	Fabricate Dimensions		Rail Dimension(mm)				Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	D x d x g1	W	L	L1	h2	P1	P2	Mx g2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15ML EE/EZ	16	8.5	15	9.5	40	6x3.5x4.5	32	61.6	44	12.8	25	25	M3x5.5	1.8	3.3	4.3	5350	9080	70	63.3	63.3	90	930	MR 15ML EE/EZ
MR 15MN EE/EZ	16	8.5	15	9.5	40	6x3.5x4.5	32	44.6	27	12.8	20	25	M3x5.5	1.8	3.3	4.3	3810	5590	43.6	27	27	61	930	MR 15MN EE/EZ
MR 12ML EE/EZ	13	7.5	12	7.5	25	6x3.5x4.5	27	49	34	10.7	20	20	M3x3.5	1.3	3.2	4.3	3240	5630	34.9	30.2	30.2	51	602	MR 12ML EE/EZ
MR 12MN EE/EZ	13	7.5	12	7.5	25	6x3.5x4.5	27	36.8	22	10.7	15	20	M3x3.5	1.3	3.2	4.3	2308	3465	21.5	12.9	12.9	34	602	MR 12MN EE/EZ
MR 9ML EE/EZ	10	5.5	9	5.5	20	6x3.5x3.5	20	41.9	30.8	8.3	16	15	M3x3.0	1.3	2.2	3.3	2135	3880	18.2	12.4	12.4	28	301	MR 9ML EE/EZ
MR 9MN EE/EZ	10	5.5	9	5.5	20	6x3.5x3.5	20	31.6	20.5	8.3	10	15	M3x3.0	1.3	2.2	3.3	1570	2495	11.7	6.4	6.4	18	301	MR 9MN EE/EZ
* MR 5ML EE/EZ	6	3.5	5	3.5	15	3.5x2.4x1	12	20.2	13.5	4.9	7	-	M2.6x2.0	0.7	1.3	2	470	900	2.4	2.1	2.1	4	116	MR 5ML EE/EZ
MR 5MN EE/EZ	6	3.5	5	3.5	15	3.5x2.4x1	12	16.6	10	4.9	-	8	M2x1.5	0.7	1.3	2	335	550	1.7	1	1	3.5	116	MR 5MN EE/EZ

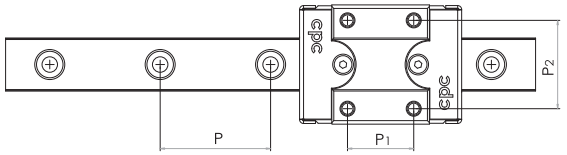
* Anticipated

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





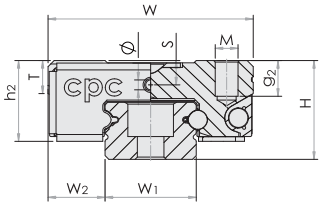


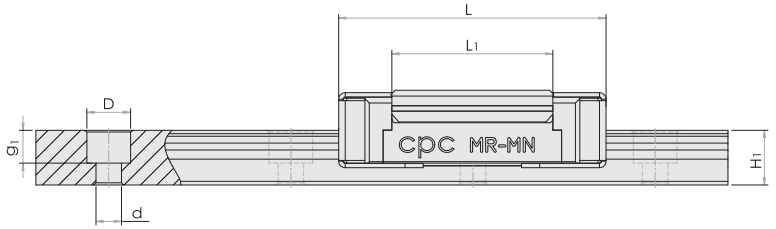


MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

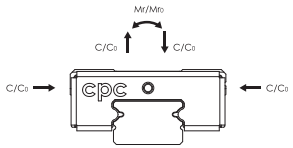
5.5 MR-M EU Series (End seal , Reinforcement Plate , Stainless Bottom Seal)
MR-M UZ Series (End seal , Reinforcement Plate , Stainless Bottom Seal , Lubrication Storage)

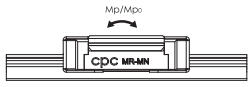


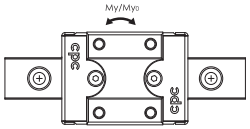


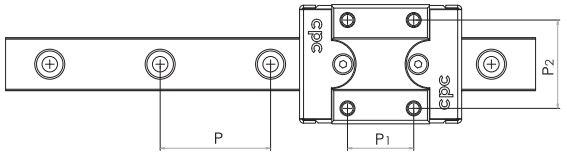
Model Code	Fabricate Dimensions		Rail Dimension(mm)				Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	D x d x g1	W	L	L1	h2	P1	P2	Mxg2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15ML EU/UZ	16	8.5	15	9.5	40	6x3.5x4.5	32	61.6	44	13.1	25	25	M3x5.5	1.8	3.3	4.3	5350	9080	70	63.3	63.3	90	930	MR 15ML EU/UZ
MR 15MN EU/UZ	16	8.5	15	9.5	40	6x3.5x4.5	32	44.6	27	13.1	20	25	M3x5.5	1.8	3.3	4.3	3810	5590	43.6	27	27	61	930	MR 15MN EU/UZ
MR 12ML EU/UZ	13	7.5	12	7.5	25	6x3.5x4.5	27	49	34	11	20	20	M3x3.5	1.3	3.2	4.3	3240	5630	34.9	30.2	30.2	51	602	MR 12ML EU/UZ
MR 12MN EU/UZ	13	7.5	12	7.5	25	6x3.5x4.5	27	36.8	22	11	15	20	M3x3.5	1.3	3.2	4.3	2308	3465	21.5	12.9	12.9	34	602	MR 12MN EU/UZ
MR 9ML EU/UZ	10	5.5	9	5.5	20	6x3.5x3.5	20	41.9	30.8	8.6	16	15	M3x3.0	1.3	2.2	3.3	2135	3880	18.2	12.4	12.4	28	301	MR 9ML EU/UZ
MR 9MN EU/UZ	10	5.5	9	5.5	20	6x3.5x3.5	20	31.6	20.5	8.6	10	15	M3x3.0	1.3	2.2	3.3	1570	2495	11.7	6.4	6.4	18	301	MR 9MN EU/UZ

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





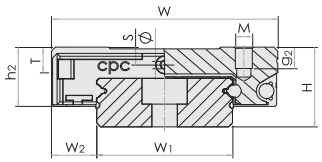




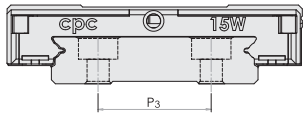
MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

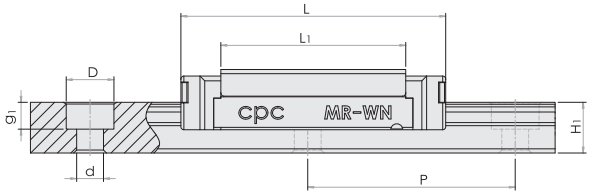
5.6 MR-W SU Series (End seal , Bottom Seal)
MR-W ZU Series (End seal , Bottom Seal , Lubrication Storage)



MR 2W-MR 12W



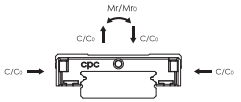
MR 15W

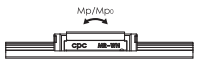


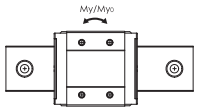
Model Code	Fabricate Dimensions		Rail Dimension(mm)					Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	P3	D x d x g1	W	L	L1	h2	P1	P2	M x g2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15WL SU/ZU	16	9	42	9.5	40	23	8x4.5x4.5	60	74.4	57.6	12.3	35	45	M4x4.5	1.8	3.3	4.5	6725	12580	257.6	93.1	93.1	200	2818	MR 15WL SU/ZU
MR 15WN SU/ZU	16	9	42	9.5	40	23	8x4.5x4.5	60	55.3	38.5	12.3	20	45	M4x4.5	1.8	3.3	4.5	5065	8385	171.1	45.7	45.7	137	2818	MR 15WN SU/ZU
MR 12WL SU/ZU	14	8	24	8.5	40	-	8x4.5x4.5	40	59.4	46	10.4	28	28	M3x3.5	1.3	3.1	4.5	4070	7800	95.6	56.4	56.4	93	1472	MR 12WL SU/ZU
MR 12WN SU/ZU	14	8	24	8.5	40	-	8x4.5x4.5	40	44.4	31	10.4	15	28	M3x3.5	1.3	3.1	4.5	3065	5200	63.7	26.3	26.3	65	1472	MR 12WN SU/ZU
MR 9WL SU/ZU	12	6	18	7.3	30	-	6x3.5x4.5	30	50.7	39.5	8.8	24	23	M3x3	1.3	2.6	4	2550	4990	45.9	26.7	26.7	51	940	MR 9WL SU/ZU
MR 9WN SU/ZU	12	6	18	7.3	30	-	6x3.5x4.5	30	39.1	27.9	8.8	12	21	M3x3	1.3	2.6	4	2030	3605	33.2	13.7	13.7	37	940	MR 9WN SU/ZU
MR 7WL SU/ZU	9	5.5	14	5.2	30	-	6x3.5x3.5	25	40.5	30.1	7.2	19	19	M3x3	1.1	1.9	3.2	1570	3140	22.65	14.9	14.9	27	516	MR 7WL SU/ZU
MR 7WN SU/ZU	9	5.5	14	5.2	30	-	6x3.5x3.5	25	31.6	21.2	7.2	10	19	M3x3	1.1	1.9	3.2	1180	2095	15	7.3	7.3	19	516	MR 7WN SU/ZU
MR 5WL SU/ZU	6.5	3.5	10	4	20	-	5.5x3x1.6	17	27.2	21.2	5.1	11	13	M2.5x1.5	0.9	1.2	2.3	615	1315	6.8	4.1	4.1	8	280	MR 5WL SU/ZU
MR 5WLC SU/ZU	6.5	3.5	10	4	20	-	5.5x3x1.6	17	27.2	21.2	5.1	11	13	M3/M2.5x1.5	0.9	1.2	2.3	615	1315	6.8	4.1	4.1	8	280	MR 5WLC SU/ZU
MR 5WN SU/ZU	6.5	3.5	10	4	20	-	5.5x3x1.6	17	21.1	15.1	5.1	6.5	13	M2.5x1.5	0.9	1.2	2.3	475	900	4.6	2.2	2.2	6	280	MR 5WN SU/ZU
MR 5WNC SU/ZU	6.5	3.5	10	4	20	-	5.5x3x1.6	17	21.1	15.1	5.1	6.5	13	M3/M2.5x1.5	0.9	1.2	2.3	475	900	4.6	2.2	2.2	6	280	MR 5WNC SU/ZU
* MR 3WL SU/ZU	4.5	3	6	2.7	15	-	4x2.4x1.5	12	20.1	15.1	3.6	8	-	M2x1.4	0.3	0.8	1.8	370	800	2.5	1.9	1.9	3.4	105	MR 3WL SU/ZU
* MR 3WN SU/ZU	4.5	3	6	2.7	15	-	4x2.4x1.5	12	15	10	3.6	4.5	-	M2x1.4	0.3	0.8	1.8	280	530	1.6	0.9	0.9	3.4	105	MR 3WN SU/ZU
* MR 2WL SU/ZU	4	3	4	3	10	-	2.8x1.8x1.0	10	17	11.9	3.1	6.5	-	M2x1.3	-	-	1.3	310	625	1.6	1.2	1.2	3.0	69	MR 2WL SU/ZU

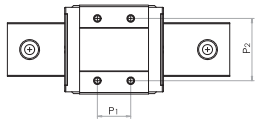
* Anticipated

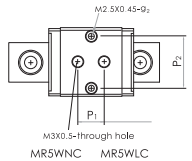
Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$









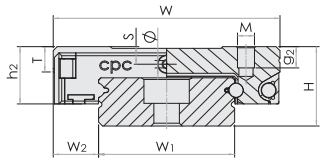


MR5WNC MR5WLC

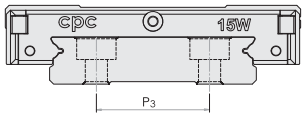
MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

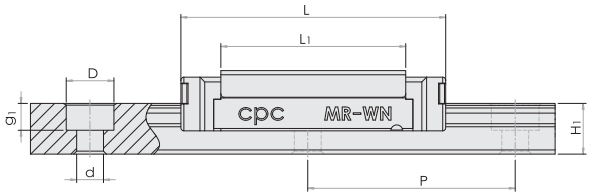
5.7 MR-W SS Series (End seal)
MR-W ZZ Series (End seal , Lubrication Storage)



MR 2W-MR 12W



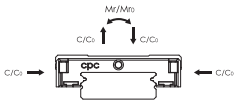
MR 15W

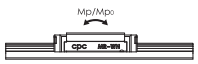


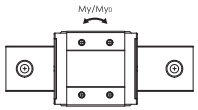
Model Code	Fabricate Dimensions		Rail Dimension(mm)					Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	P3	D x d x g 1	W	L	L1	h2	P1	P2	M x g2	Ø	S	T	C 100 (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15WL SS/ZZ	16	9	42	9.5	40	23	8x4.5x4.5	60	74.5	57.6	12	35	45	M4x4.5	1.9	3.3	4.5	6725	12580	257.6	93.1	93.1	200	2818	MR 15WL SS/ZZ
MR 15WN SS/ZZ	16	9	42	9.5	40	23	8x4.5x4.5	60	55.8	38.5	12	20	45	M4x4.5	1.9	3.3	4.5	5065	8385	171.1	45.7	45.7	137	2818	MR 15WN SS/ZZ
MR 12WL SS/ZZ	14	8	24	8.5	40	-	8x4.5x4.5	40	59.6	46	10.1	28	28	M3x3.5	1.4	3.1	4.5	4070	7800	95.6	56.4	56.4	93	1472	MR 12WL SS/ZZ
MR 12WN SS/ZZ	14	8	24	8.5	40	-	8x4.5x4.5	40	44.5	31.1	10.1	15	28	M3x3.5	1.4	3.1	4.5	3065	5200	63.7	26.3	26.3	65	1472	MR 12WN SS/ZZ
MR 9WL SS/ZZ	12	6	18	7.3	30	-	6x3.5x4.5	30	50.7	39.4	8.6	24	23	M3x3	1.3	2.6	4	2550	4990	45.9	26.7	26.7	51	940	MR 9WL SS/ZZ
MR 9WN SS/ZZ	12	6	18	7.3	30	-	6x3.5x4.5	30	39.1	27.9	8.6	12	21	M3x3	1.3	2.6	4	2030	3605	33.2	13.7	13.7	37	940	MR 9WN SS/ZZ
MR 7WL SS/ZZ	9	5.5	14	5.2	30	-	6x3.5x3.5	25	40.5	30.1	7	19	19	M3x3	1.1	1.9	3.2	1570	3140	22.65	14.9	14.9	27	516	MR 7WL SS/ZZ
MR 7WN SS/ZZ	9	5.5	14	5.2	30	-	6x3.5x3.5	25	31.8	21.2	7	10	19	M3x3	1.1	1.9	3.2	1180	2095	15	7.3	7.3	19	516	MR 7WN SS/ZZ
MR 5WL SS	6.5	3.5	10	4	20	-	5.5x3x1.6	17	27.2	21.2	5	11	13	M2.5x1.5	0.9	1.2	2.3	615	1315	6.8	4.1	4.1	8	280	MR 5WL SS
MR 5WLC SS	6.5	3.5	10	4	20	-	5.5x3x1.6	17	27.2	21.2	5	11	13	M3/M2.5x1.5	0.9	1.2	2.3	615	1315	6.8	4.1	4.1	8	280	MR 5WLC SS
MR 5WN SS	6.5	3.5	10	4	20	-	5.5x3x1.6	17	21.1	15.1	5	6.5	13	M2.5x1.5	0.9	1.2	2.3	475	900	4.6	2.2	2.2	6	280	MR 5WN SS
MR 5WNC SS	6.5	3.5	10	4	20	-	5.5x3x1.6	17	21.1	15.1	5	6.5	13	M3/M2.5x1.5	0.9	1.2	2.3	475	900	4.6	2.2	2.2	6	280	MR 5WNC SS
* MR 3WL SS/ZZ	4.5	3	6	2.7	15	-	4x2.4x1.5	12	20.1	15.1	3.5	8	-	M2x1.4	0.3	0.8	1.8	370	800	2.5	1.9	1.9	3.4	105	MR 3WL SS/ZZ
* MR 3WN SS/ZZ	4.5	3	6	2.7	15	-	4x2.4x1.5	12	15	10	3.5	4.5	-	M2x1.4	0.3	0.8	1.8	280	530	1.6	0.9	0.9	3.4	105	MR 3WN SS/ZZ
* MR 2WL SS/ZZ	4	3	4	3	10	-	2.8x1.8x1.0	10	17	11.9	3	6.5	-	M2x1.3	-	-	1.3	310	625	1.6	1.2	1.2	3.0	69	MR 2WL SS/ZZ

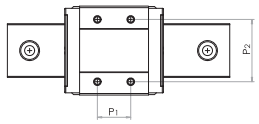
* Anticipated

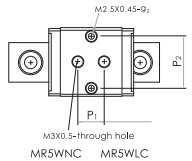
Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: C_{50B}=1.26xC_{100B}







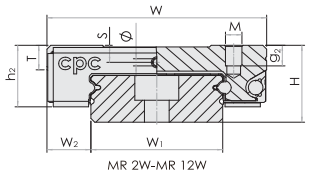




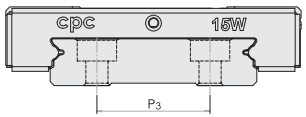
MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

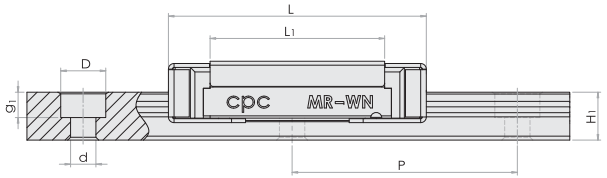
5.8 MR-W SUE Series (End seal , Bottom Seal , Reinforcement Plate)
MR-W ZUE Series (End seal , Bottom Seal , Reinforcement Plate , Lubrication Storage)



MR 2W-MR 12W

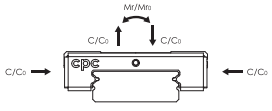


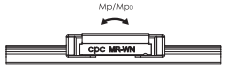
MR 15W

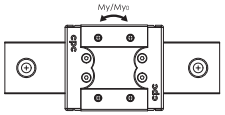


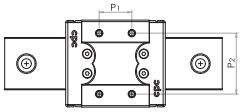
Model Code	Fabricate Dimensions		Rail Dimension(mm)					Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	P3	D x d x g1	W	L	L1	h2	P1	P2	Mxg2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15WL SUE/ZUE	16	9	42	9.5	40	23	8x4.5x4.5	60	76	57.6	13.1	35	45	M4x4.5	1.8	3.3	4.5	6725	12580	257.6	93.1	93.1	203	2818	MR 15WL SUE/ZUE
MR 15WN SUE/ZUE	16	9	42	9.5	40	23	8x4.5x4.5	60	56.9	38.5	13.1	20	45	M4x4.5	1.8	3.3	4.5	5065	8385	171.1	45.7	45.7	140	2818	MR 15WN SUE/ZUE
MR 12WL SUE/ZUE	14	8	24	8.5	40	-	8x4.5x4.5	40	60.8	46	11.2	28	28	M3x3.5	1.3	3.1	4.5	4070	7800	95.6	56.4	56.4	96	1472	MR 12WL SUE/ZUE
MR 12WN SUE/ZUE	14	8	24	8.5	40	-	8x4.5x4.5	40	45.8	31	11.2	15	28	M3x3.5	1.3	3.1	4.5	3065	5200	63.7	26.3	26.3	68	1472	MR 12WN SUE/ZUE
MR 9WL SUE/ZUE	12	6	18	7.3	30	-	6x3.5x4.5	30	51.8	39.5	9.4	24	23	M3x3	1.3	2.6	4	2550	4990	45.9	26.7	26.7	51	940	MR 9WL SUE/ZUE
MR 9WN SUE/ZUE	12	6	18	7.3	30	-	6x3.5x4.5	30	40.2	27.9	9.4	12	21	M3x3	1.3	2.6	4	2030	3605	33.2	13.7	13.7	37	940	MR 9WN SUE/ZUE
MR 7WL SUE/ZUE	9	5.5	14	5.2	30	-	6x3.5x3.5	25	41.5	30.1	7.6	19	19	M3x3	1.1	1.9	3.2	1570	3140	22.65	14.9	14.9	27	516	MR 7WL SUE/ZUE
MR 7WN SUE/ZUE	9	5.5	14	5.2	30	-	6x3.5x3.5	25	32.5	21.2	7.6	10	19	M3x3	1.1	1.9	3.2	1180	2095	15	7.3	7.3	19	516	MR 7WN SUE/ZUE
MR 2WL SUE/ZUE	4	3	4	3	10	-	2.8x1.8x1.0	10	17.5	11.9	3.4	6.5	-	M2x1.3	-	-	1.3	310	625	1.6	1.2	1.2	3.0	69	MR 2WL SUE/ZUE

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





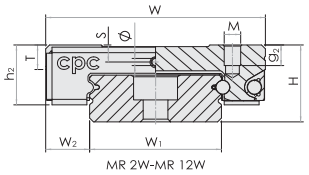




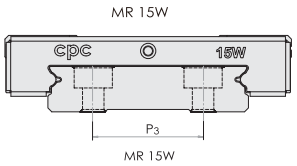
MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

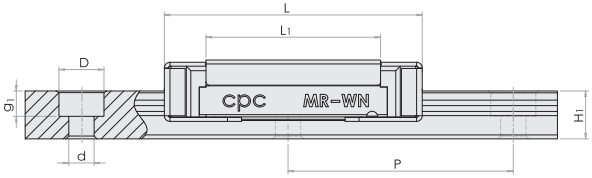
5.9 MR-W EE Series (End seal, Reinforcement Plate)
MR-W EZ Series (End seal , Reinforcement Plate , Lubrication Storage)



MR 2W-MR 12W

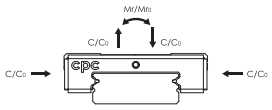


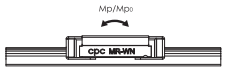
MR 15W

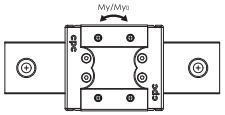


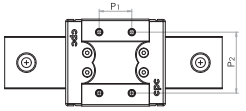
Model Code	Fabricate Dimensions		Rail Dimension(mm)					Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	P3	D x d x g 1	W	L	L1	h2	P1	P2	M x g 2	Ø	S	T	C 100 (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15WL EE/EZ	16	9	42	9.5	40	23	8x4.5x4.5	60	76	57.6	12.8	35	45	M4x4.5	1.8	3.3	4.5	6725	12580	257.6	93.1	93.1	203	2818	MR 15WL EE/EZ
MR 15WN EE/EZ	16	9	42	9.5	40	23	8x4.5x4.5	60	56.9	38.5	12.8	20	45	M4x4.5	1.8	3.3	4.5	5065	8385	171.1	45.7	45.7	140	2818	MR 15WN EE/EZ
MR 12WL EE/EZ	14	8	24	8.5	40	-	8x4.5x4.5	40	60.8	46	10.9	28	28	M3x3.5	1.3	3.1	4.5	4070	7800	95.6	56.4	56.4	96	1472	MR 12WL EE/EZ
MR 12WN EE/EZ	14	8	24	8.5	40	-	8x4.5x4.5	40	45.8	31	10.9	15	28	M3x3.5	1.3	3.1	4.5	3065	5200	63.7	26.3	26.3	68	1472	MR 12WN EE/EZ
MR 9WL EE/EZ	12	6	18	7.3	30	-	6x3.5x4.5	30	51.8	39.5	9.2	24	23	M3x3	1.3	2.6	4	2550	4990	45.9	26.7	26.7	51	940	MR 9WL EE/EZ
MR 9WN EE/EZ	12	6	18	7.3	30	-	6x3.5x4.5	30	40.2	27.9	9.2	12	21	M3x3	1.3	2.6	4	2030	3605	33.2	13.7	13.7	37	940	MR 9WN EE/EZ
MR 7WL EE/EZ	9	5.5	14	5.2	30	-	6x3.5x3.5	25	41.5	30.1	7.5	19	19	M3x3	1.1	1.9	3.2	1570	3140	22.65	14.9	14.9	27	516	MR 7WL EE/EZ
MR 7WN EE/EZ	9	5.5	14	5.2	30	-	6x3.5x3.5	25	32.5	21.2	7.5	10	19	M3x3	1.1	1.9	3.2	1180	2095	15	7.3	7.3	19	516	MR 7WN EE/EZ
MR 2WL EE/EZ	4	3	4	3	10	-	2.8x1.8x1.0	10	17.5	11.9	3.3	6.5	-	M2x1.3	-	-	1.3	310	625	1.6	1.2	1.2	3.0	69	MR 2WL EE/EZ

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$





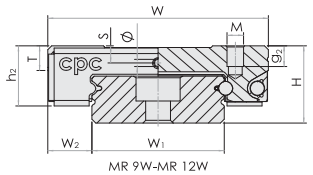




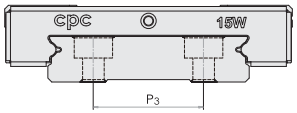
MINIATURE LINEAR GUIDE SERIES MR

5. Dimensions and Specifications

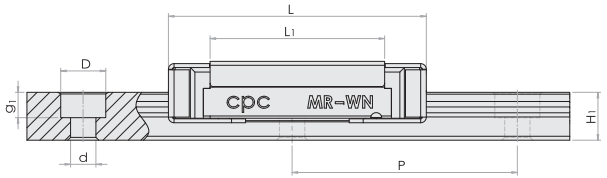
5.10 MR-W EU Series (End seal , Reinforcement Plate , Stainless Bottom Seal)
MR-W UZ Series (End seal , Reinforcement Plate , Stainless Bottom Seal , Lubrication Storage)



MR 9W-MR 12W

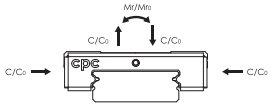


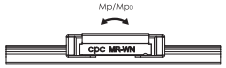
MR 15W

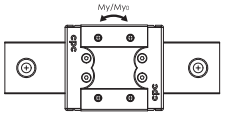


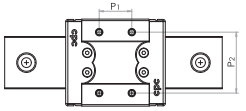
Model Code	Fabricate Dimensions		Rail Dimension(mm)					Block Dimension(mm)						Block Dimension(mm)				Load Capacities(N)		Static Moment(Nm)			Weight		Model Code
	H	W2	W1	H1	P	P3	D x d x g1	W	L	L1	h2	P1	P2	Mxg2	Ø	S	T	C100B (dyn)	C0 (stat)	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
MR 15WL EU/UZ	16	9	42	9.5	40	23	8x4.5x4.5	60	76	57.6	13.1	35	45	M4x4.5	1.8	3.3	4.5	6725	12580	257.6	93.1	93.1	203	2818	MR 15WL EU/UZ
MR 15WN EU/UZ	16	9	42	9.5	40	23	8x4.5x4.5	60	56.9	38.5	13.1	20	45	M4x4.5	1.8	3.3	4.5	5065	8385	171.1	45.7	45.7	140	2818	MR 15WN EU/UZ
MR 12WL EU/UZ	14	8	24	8.5	40	-	8x4.5x4.5	40	60.8	46	11	28	28	M3x3.5	1.3	3.1	4.5	4070	7800	95.6	56.4	56.4	96	1472	MR 12WL EU/UZ
MR 12WN EU/UZ	14	8	24	8.5	40	-	8x4.5x4.5	40	45.8	31	11	15	28	M3x3.5	1.3	3.1	4.5	3065	5200	63.7	26.3	26.3	68	1472	MR 12WN EU/UZ
MR 9WL EU/UZ	12	6	18	7.3	30	-	6x3.5x4.5	30	51.8	39.5	9.5	24	23	M3x3	1.3	2.6	4	2550	4990	45.9	26.7	26.7	51	940	MR 9WL EU/UZ
MR 9WN EU/UZ	12	6	18	7.3	30	-	6x3.5x4.5	30	40.2	27.9	9.5	12	21	M3x3	1.3	2.6	4	2030	3605	33.2	13.7	13.7	37	940	MR 9WN EU/UZ

Load capacities are calculated according to ISO 14728. To compare the rating life definition and the load capacities: $C_{50B}=1.26xC_{100B}$

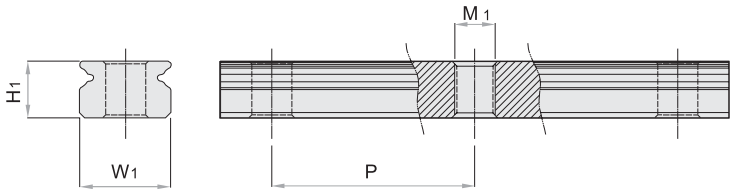








5. Dimensions and Specifications



5.13 Standard MRU-M series - Tapped from bottom

Dimensions and Specifications

Model Code	Rail Dimensions (mm)			
	H_1	W_1	P	M_1
MRU 15M	9.5	15	40	M4x0.7
MRU 12M	7.5	12	25	M4x0.7
MRU 9M	5.5	9	20	M4x0.7
MRU 7M	4.7	7	15	M3x0.5
MRU 5M	3.5	5	15	M3x0.5
MRU 3M	2.6	3	10	M1.6 x0.35

5.14 Wide MRU-W series - Tapped from bottom

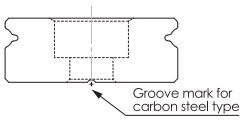
Dimensions and Specifications

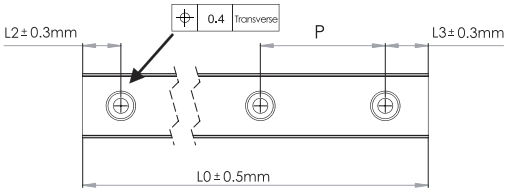
Model Code	Rail Dimensions (mm)			
	H_1	W_1	P	M_1
MRU 15W	9.5	42	40	M5x0.8
MRU 12W	8.5	24	40	M5x0.8
MRU 9W	7.3	18	30	M4x0.7
MRU 7W	5.2	14	30	M4x0.7
MRU 5W	4	10	20	M3x0.5
MRU 3W	2.7	6	15	M3x0.5

6. Carbon Steel

Characteristic

1. Providing the max length: 3m.
2. Hardness of the ball runner rail surface : HRC 58 ~ 63
   Hardness of the centre : About HRC 28
3. Applies to the industrial machine in normal condition.
4. Sizes are the same as stainless steel products.
5. With more competitive price.
6. Precision class available for N, H, and P Grade.
7. Product size, precision class, and other technical information are the same as MR stainless series, please refer to cpc MR Miniature Linear Guide Series Catalog.

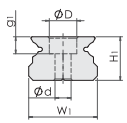




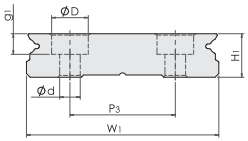
	Standard			Wide		
Suggestion length of one rail	Size			Size		
	9M	12M	15M	9W	12W	15W
Pitch(mm)	20	25	40	30	40	40
L2, L3 min	4	4	4	4	4	4
L2, L3 max	20	20	35	25	35	35
Lmax L0 (mm)	3000	3000	3000	3000	3000	3000

6. Carbon Steel

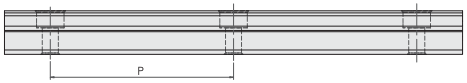
Standard Rail



MR-M
MR-9W/12W



MR15W



Standard MR-M series Rail

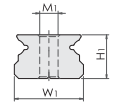
Model Code	Rail Dimensions(mm)				Weight(g/m)
	H1	W1	P	Dxdxg1	
MR 15M	9.5	15	40	6x3.5x4.5	930
MR 12M	7.5	12	25	6x3.5x4.5	602
MR 9M	5.5	9	20	6x3.5x3.5	301

Wide MR-W series Rail

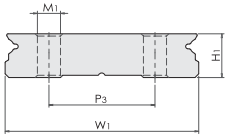
Model Code	Rail Dimensions(mm)					Weight(g/m)
	H1	W1	P	P3	Dxdxg1	
MR 15W	9.5	42	40	23	8x4.5x4.5	2818
MR 12W	8.5	24	40	-	8x4.5x4.5	1472
MR 9W	7.3	18	30	-	6x3.5x4.5	940

ST Miniature Stroke Slide series

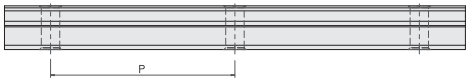
Tapped Rail



MRU-M
MRU-9W/12W



MRU15W



Standard MRU-M series - Tapped from bottom

Model Code	Rail Dimensions(mm)				Weight(g/m)
	H1	W1	P	M1	
MRU 15M	9.5	15	40	M4x0.7	930
MRU 12M	7.5	12	25	M4x0.7	602
MRU 9M	5.5	9	20	M4x0.7	301

Wide MRU-W series - Tapped from bottom

Model Code	Rail Dimensions(mm)					Weight(g/m)
	H1	W1	P	P3	M1	
MRU 15W	9.5	42	40	23	M5x0.8	2818
MRU 12W	8.5	24	40	-	M5x0.8	1472
MRU 9W	7.3	18	30	-	M4x0.7	940

ST Miniature Stroke Slide series
ST

1. Product Introduction

High load and high moment capacity

The ST Miniature Stroke Slide series is designed with two rows of balls. The ball track has a Gothic profile design with a 45 degree contact angle to achieve equal load capacity in a mono block. This provides more space for the larger rolling elements while enhancing the load and moment capacity.

High running accuracy and smoothness

The steel balls of the ST Miniature Stroke Slide series roll on the rail without recirculation, resulting in excellent running behavior, smoothness, low friction, and high accuracy without vibration.

Dual plate design

The ST Miniature Stroke Slide series adopts a pair of end plates into the design. Both the center rail and bearing block sides have a plate installed that prevents the linear guide from over-stroking.

Easy mounting

The mounting of the ST Miniature Stroke Slide series is accomplished by fitting the fixing screw downward into the count bore of the rail by intersecting the bole pattern on the block and cage within a hole pitch. The one piece cage therefore does not influence the mounting of the rail. The preload is preset by ball sorting.

Temperature

The ST Miniature Stroke Slide series can withstand temperatures up to 150° C. There are two treatment options for higher temperature applications:

T1 : 200°C
T2 : 300°C

Applying treatments for higher temperature applications will reduce the load capacity.

Anti-corrosion feature

The ST Miniature Stroke Slide series is composed of quenched hardened process stainless steel for the rail, block, and steel balls. The block plate and screw are made of stainless steel as well -- great for maintenance and inspection applications.

2. Technical Information

Accuracy

The ST Miniature Stroke Slide series have three grades for accuracy. Precision (P), High (H) and Normal (N).

Preload

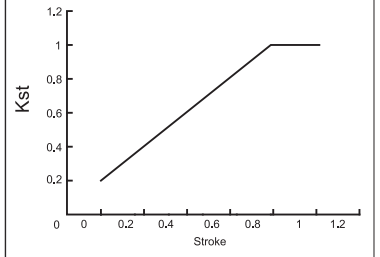
The ST Miniature Stroke Slide series have two classes of preload, V0 and V1, as described in the MR miniature linear guide series table of preload.

Rating life calculation

$$L = K_{st}\left(\frac{C_{100}}{P}\right)^3 \cdot 10^5 \quad \text{——(19)}$$

$$L_h = \frac{L}{2 \cdot s \cdot n \cdot 60} = K_{st} \cdot \frac{L}{v_m \cdot 60} \quad \text{——(20)}$$

Short stroke factor diagram



According to ISO14728-1 short stroke factor

Lubrication

Lubrication of the ST Miniature Stroke Slide series can be done by adding the lubricant onto the raceway of the rail.

Rating life L

The rating life of the ST Miniature Stroke Slide series can be calculated by the formulas (19) , (20) in accordance with ISO 14728-1.

Geometric and positional accuracy of the mounting surface

The inaccuracy of the mounting surfaces will affect the running accuracy and reduce the operating lifetime of the ST Miniature Stroke Slide. If the inaccuracies of the mounting surface exceed the values calculated by formulas (15), (21), and (17), the lifetime will be shortened, as calculated by formulas (19) and (20).

$$e_{1\,(mm)} = b_{(mm)} \cdot f_1 \cdot 10^{-4} \quad \text{——(15)}$$

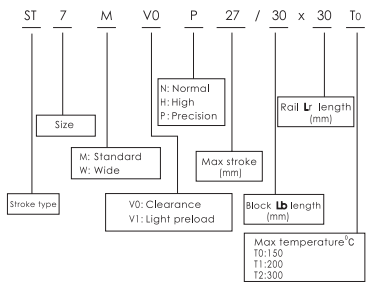
$$e_{2\,(mm)} = \left(\frac{d_{(mm)}}{Lc_{(mm)}}\right) \cdot f_2 \cdot 10^{-5} \quad \text{——(21)}$$

$$e_{3\,(mm)} = f_3 \cdot 10^{-3} \quad \text{——(17)}$$

The mounting surface geometric and positional accuracy factor

Size	V0			V1		
	f_1	f_2	f_3	f_1	f_2	f_3
7	5	200	4	3	130	3
9	5	300	6	4	200	4
12	6	380	8	4	250	6
15	7	530	12	5	350	8

Ordering designation



Height and chamfered reference edge

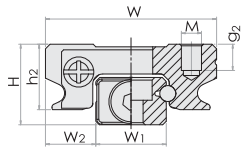
The tables for the chamfered reference edge corner and the height of the reference edge for the MR Miniature Linear Guide series are also suitable for the ST Miniature Stroke Slide series.

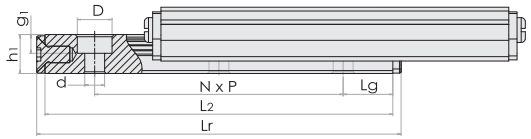
3. Ordering Information

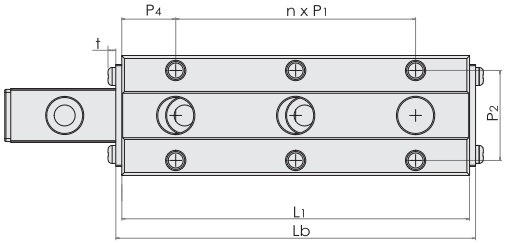
An example of the ST Miniature Stroke Slide series parts numbering system is shown above.

ST Miniature Stroke Slide series ST

4. Dimensions and Specifications



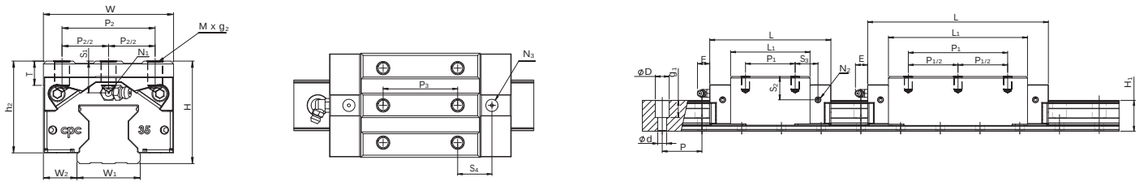




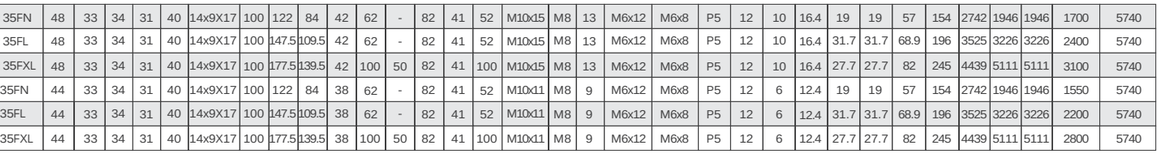
Model Code	Fabricate Dimensions (mm)		Rail Dimensions (mm)				Block Dimensions (mm)						Model Code
	H	W_2	P	W_1	h_1	D x d x g_1	P_1	P_2	W	h_2	Mxg_2	t	
ST7M	8	5	15	7	4.7	4.2x2.4x2.3	15	12	17	6.5	M2x2.5	1	ST7M
ST9M	10	5.5	20	9	5.5	6x3.5x3.5	20	15	20	7.8	M3x3.0	1.3	ST9M
ST12M	13	7.5	25	12	7.5	6x3.5x4.5	25	20	27	10	M3x3.5	1.3	ST12M

Model Code	Max Stroke	Rail Dimensions (mm)				Block Dimensions (mm)				Load Capacities		Static Moment		
	Ls	Lr	L_2	Lg	N	Lb	L_1	P_4	n	C_{100B}(dyn)	C_0(stat)	Mr_0	Mp_0	My_0
ST7M	27	30	28	6.5	1	30	28	6.5	1	910	1580	5.9	3.4	3.4
ST7M	41	45	43	6.5	2	45	43	6.5	2	1220	2500	9.1	8	8
ST7M	55	60	58	6.5	3	60	58	6.5	3	1490	3330	12.4	14.6	14.6
ST9M	38	40	38	9	1	40	38	9	1	1590	2773	13.1	6.8	6.8
ST9M	58	60	58	9	2	60	58	9	2	2080	4170	19.7	16	16
ST9M	78	80	78	9	3	80	78	9	3	2520	5547	26.2	29.2	29.2
ST12M	44	50	47.4	11.2	1	50	47.4	11.2	1	2550	4340	27	16	16
ST12M	69	75	72.4	11.2	2	75	72.4	11.2	2	3350	6510	40.1	35.6	35.6
ST12M	94	100	97.4	11.2	3	100	97.4	11.2	3	4050	8670	54	62.8	62.8

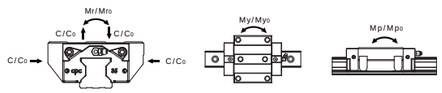
Dimensions Table



Model Code	Mounting Dimensions		Rail Dimensions (mm)				Block Dimensions (mm)																				Load Capacity (KN)		Static Moment (Nm)			Weight	
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P1/2	P2	P2/2	P3	Mxg2	M1	T	N1	N2	N3	E	S1	S2	S3	S4	C ISO 100km	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)
ARR 35MN	48	18	34	31	40	14x9X17	70	122	84	42	50	-	50	25	50	M8x13	-	13	M6x12	M6x8	P5	12	10	16.4	25	25	57	154	2742	1946	1946	1200	5740
ARR 35ML	48	18	34	31	40	14x9X17	70	147.5	109.5	42	72	-	50	25	72	M8x13	-	13	M6x12	M6x8	P5	12	10	16.4	26.7	26.7	68.9	196	3525	3226	3226	1750	5740
HRR 35MN	55	18	34	31	40	14x9X17	70	122	84	49	50	-	50	25	50	M8x16	-	13	M6x12	M6x8	P5	12	17	23.4	25	25	57	154	2742	1946	1946	1720	5740
HRR 35ML	55	18	34	31	40	14x9X17	70	147.5	109.5	49	72	-	50	25	72	M8x16	-	13	M6x12	M6x8	P5	12	17	23.4	26.7	26.7	68.9	196	3525	3226	3226	2100	5740
HRR 35MXL	55	18	34	31	40	14x9X17	70	177.5	139.5	49	100	50	50	25	100	M8x16	-	13	M6x12	M6x8	P5	12	17	23.4	27.7	27.7	82	245	4439	5111	5111	2700	5740
LRR 35MN	44	18	34	31	40	14x9X17	70	122	84	38	50	-	50	25	50	M8x12	-	9	M6x12	M6x8	P5	12	6	12.4	25	25	57	154	2742	1946	1946	1100	5740
LRR 35ML	44	18	34	31	40	14x9X17	70	147.5	109.5	38	72	-	50	25	72	M8x12	-	9	M6x12	M6x8	P5	12	6	12.4	26.7	26.7	68.9	196	3525	3226	3226	1500	5740
LRR 35MXL	44	18	34	31	40	14x9X17	70	177.5	139.5	38	100	50	50	25	100	M8x12	-	9	M6x12	M6x8	P5	12	6	12.4	27.7	27.7	82	245	4439	5111	5111	1900	5740



HRR 35FN	48	33	34	31	40	14x9X17	100	122	84	42	62	-	82	41	52	M10x15	M8	13	M6x12	M6x8	P5	12	10	16.4	19	19	57	154	2742	1946	1946	1700	5740
HRR 35FL	48	33	34	31	40	14x9X17	100	147.5	109.5	42	62	-	82	41	52	M10x15	M8	13	M6x12	M6x8	P5	12	10	16.4	31.7	31.7	68.9	196	3525	3226	3226	2400	5740
HRR 35FXL	48	33	34	31	40	14x9X17	100	177.5	139.5	42	100	50	82	41	100	M10x15	M8	13	M6x12	M6x8	P5	12	10	16.4	27.7	27.7	82	245	4439	5111	5111	3100	5740
LRR 35FN	44	33	34	31	40	14x9X17	100	122	84	38	62	-	82	41	52	M10x11	M8	9	M6x12	M6x8	P5	12	6	12.4	19	19	57	154	2742	1946	1946	1550	5740
LRR 35FL	44	33	34	31	40	14x9X17	100	147.5	109.5	38	62	-	82	41	52	M10x11	M8	9	M6x12	M6x8	P5	12	6	12.4	31.7	31.7	68.9	196	3525	3226	3226	2200	5740
LRR 35FXL	44	33	34	31	40	14x9X17	100	177.5	139.5	38	100	50	82	41	100	M10x11	M8	9	M6x12	M6x8	P5	12	6	12.4	27.7	27.7	82	245	4439	5111	5111	2800	5740



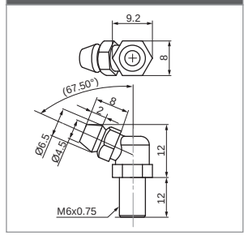
Ordering Information Model Code

ARR	U	35	M	N	S	2	C	V1	P	-1480L	-20	-20	II	/J

- /J: Customization code
- II: Number of rails on the same moving axis
- -20: End hole pitch(mm)
- -20: Starting hole pitch(mm)
- -1480L: Rail length(mm)
- P: Accuracy grade: UP, SP, P, H
- V1: Preload class: V0, V1, V2
- C: with ball chain
- 2: Block quantity
- S: Seal type: S:standard
- N: Block length: N:standard L:long XL:extra long
- M: Block width: M:standard F:flanged
- 35: Block type: 35,45
- U: U: Rail (tapped from the bottom)
- ARR: Product type: ARR: Low Profile Type HRR: High Profile Type LRR: Extremely Low Profile Type

Grease nipple

B-M6L



PS. Customiztion request please refer to ARC/HRC/ERC Ball Type Linear Guide Series catalog

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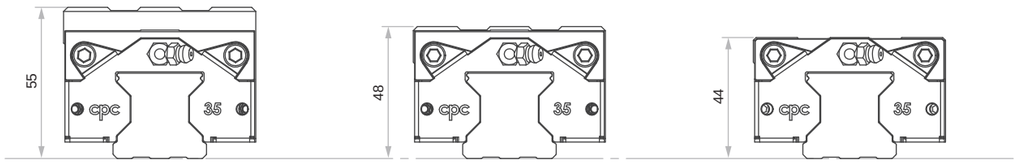
CHIEFTEK PRECISION CO., LTD.

ARR/HRR/LRR series

ARC-09-O91-EN

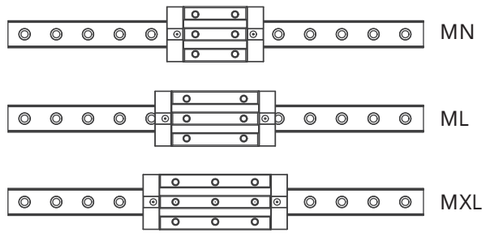
LRR Extremely Low Profile Type

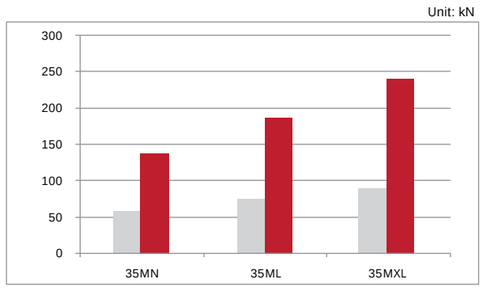
Compared to the industry's standard, with various combination and low center of gravity provides a more compact space, and is suitable for occasions that need to lower external torque and smaller inertial force. ARR, HRR, LRR's block, all share the same track, and with same load capacity and service life.

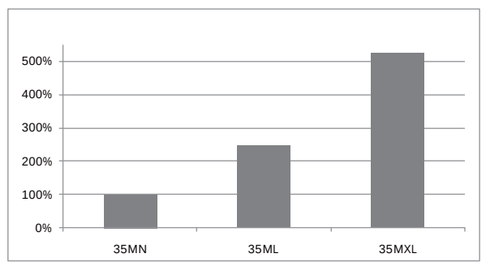


MXL Ultra Long Block Type

Compared to the industry's ML lengthened block, MXL is the model with a much lengthened block and can demonstrate a greater load capability and rigidity, and better shock reduction capability. It's suitable for machine tool that requires super high rigidity and accuracy.



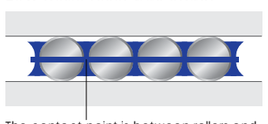




Mute Roller Ball Chain (Optional)

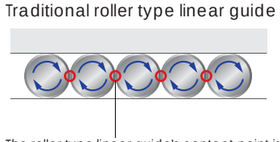
Ball chain can effectively lower high frequency noise volume while sliding, and enhance smoothness. The ball chain spacer beteen steel rollers can continuously replenish the oil film cladding to maintain better lubrication effect.

Low noise roller ball chain



The contact point is between rollers and ball chain, so the surface pressure is low.

Traditional roller type linear guide

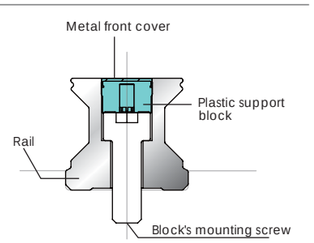


The roller type linear guide's contact point is only between rollers, thus the surface pressure is high.

Hole Plug (Standard Feature)

Stainless steel cover can demonstrateexcellent friction resistance ability under harsh environment. Inside the hole plug is equipped with plastic fixed support, having easy installation characteristics, can directly be installed on the standard rail. Contact between support part and stigma screws can prevent over fastening while installation, and can prevent foreign objects from stacking while sliding as well.

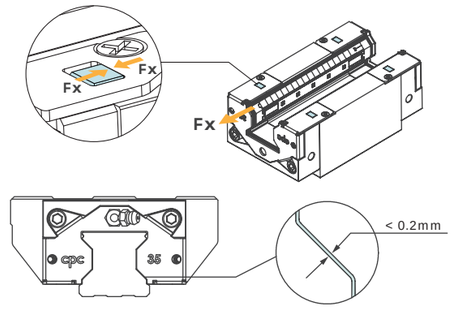
* Rail-bolt-hole without chamfer must be installed with metal-plastic-cap or plastic cap in order to prevent seal from scratch.



High Rigidity Stainless Steel Reinforcement Plate (Standard Feature)

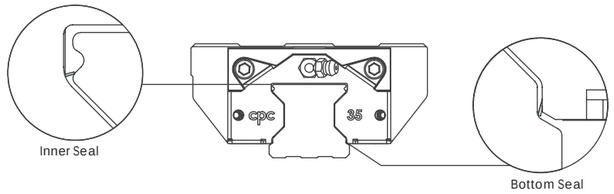
L-shaped design is locked with end and bottom screw on block body respectively. The bottom of the body is equipped with integrated bolt, and can fix the reinforcement plate tightly to prevent plastic mountings from cracking and result in block damage.

With clearance between end reinforcement plate and rail profile of merely 0.2mm, the plate can prevent foreigh objects from sliding into, and protect the end seal.



Full Cover Seal (Standard Feature)

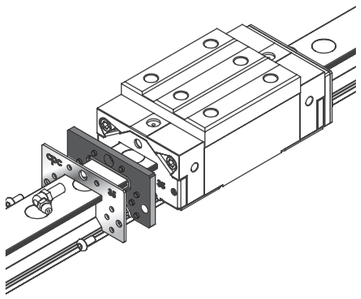
All model type are equipped with "end seal", "bottom seal", "inner seal" and can effectively prevent foreigh objects from sliding into the block, and prevent lubrication from leaking out.



Countermeasure for Dustproof under Harsh Environmental Conditions (Optional)

NBR Seal(Ordering Code / SN)

The seal can demonstrate high dustproof ability focusing on the fine dust working condition, such as wood-working machine, glass processing machine, graphite processing machine, and grinder. On the outer side of the seal is equipped with stainless steel scraper, and the clearance between inner contour and rail contour is only 0.2~0.3mm. This can prevent comparatively large foreign objects from damaging rubber seal.



Accuracy

The ARR/HRR/ERR linear guides provide 4 different grades of precision : H, P, SP, and UP, Engineers can choose different grades depend on the machine applications.

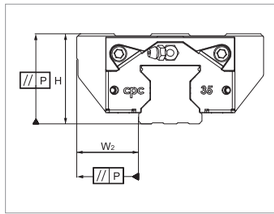


Table of accuracy

Accuracy grades (μm)		UP	SP	P	H
Tolerance of dimension height H	H	±5	±10	±20	±40
Variation of height for different runner Block on the same position of Rail	ΔH	3	5	7	15
Tolerance of dimension width W_2	W_2	±5	±7	±10	±20
Variation of width for different runner Block on the same position of Rail	ΔW_2	3	5	7	15

Accuracy of the running parallelism