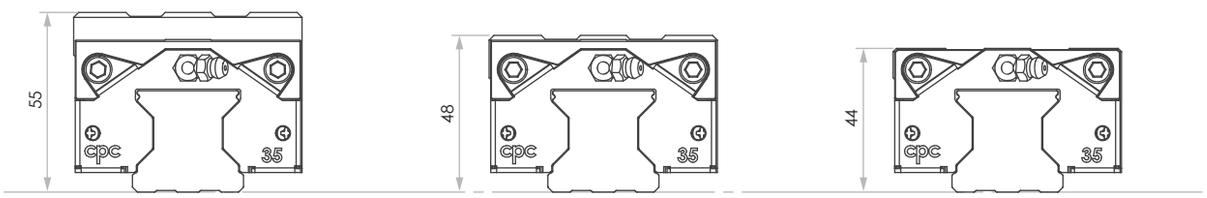
ARR/HRR/LRR series
Roller-type Linear Guide

Product Overview

LRR Extremely Low Profile Type

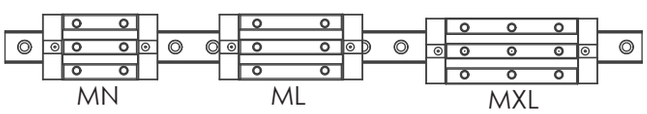
Suitable for conditions where a lower external torque and inertial force is required, this product combines a low height and center of gravity to provide a more compact product. ARR, HRR and LRRs blocks all share the same rail with a similar load capacity and service life.

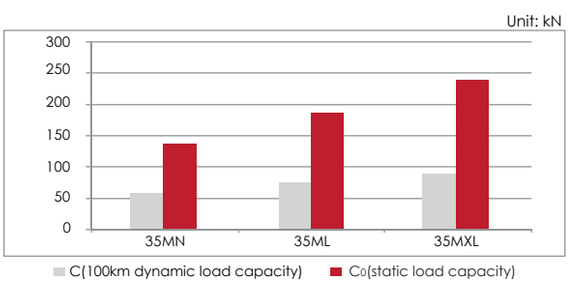


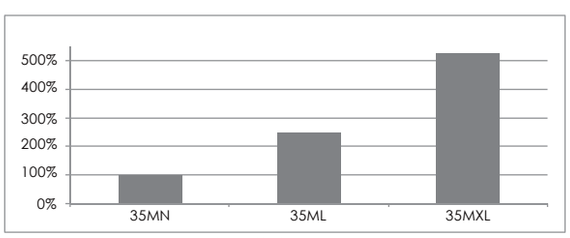
HRR 35MN ARR 35MN LRR 35MN

MXL Ultra Long Block Type

Compared to the industry's ML lengthened block, the MXL model's much lengthened block features a greater load, rigidity and shock reduction capability. This makes this model most suitable for machine tools that require super high rigidity and accuracy.



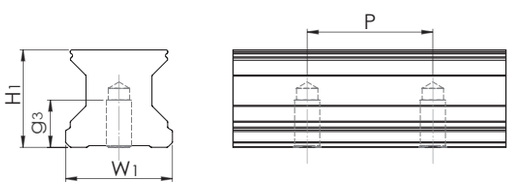




Service Life(under same load)

Dimensions Table

ARRU Series Rail (tapped from the bottom)



Model Code	W1	H1	P	Mxg3	Lmax	Rail(g/m)
ARRU 35	34	31	40	M8x15	4000	5740
ARRU 45	45	38	52.5	M12x19	4000	10000

Parts information

Low Noise Roller Chain (Optional)

Our Ball chain design effectively lowers high frequency noise volumes while sliding and enhancing smoothness. Additionally, the ball chain spacer between steel rollers continuously replenishes the oil film cladding to maintain a better lubrication effect.

(For more information please refer to page 07)

Full Cover Seal (Standard Feature)

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

(For more information please refer to page 03)

High Rigidity Stainless Steel Reinforcement Plate (Standard Feature)

Our L-shaped design is locked with end and bottom screws on the block body. The bottom of the body is equipped with an integrated bolt, which allows for the tight fixing of the reinforcement plate to prevent unnecessary block damage from cracking the plastic mountings.

(For more information please refer to page 06)

Metal-Plastic-Cap (Standard Feature)

Stainless steel covers can demonstrate excellent friction resistance under harsh environments. Inside, the hole plug is equipped with fixed plastic support, enabling for easy installation and direct installation on a standard rail. Contact between the unit support part and stigma screws can prevent overly deep fastening during installation, while also preventing cap indentation and foreign objects from stacking while sliding.

(For more information please refer to page 10)

NBR Seal (Optional)

The seal demonstrates a high dustproof ability to be used in high dust particle working environments, being ideally placed in wood-working machines, glass processing machines, graphite processing machines and grinders. On the outer side of the seal is equipped a stainless steel scraper, with the clearance between the inner and rail contour measuring at only 0.2~0.3mm. This can prevent comparatively large foreign objects from damaging the rubber seal.

(For more information please refer to page 09)

Ordering Information

Model Code

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

Customization code (please refer to page 30)

Number of rails on the same moving axis

End hole pitch(mm)

Starting hole pitch(mm)

Rail length(mm)

Accuracy grade: UP, SP, P, H (please refer to page 29)

Preload class: V0, V1, V2

C: with ball chain (please refer to page 07)

Block quantity

Seal type: S:standard

Block length: N:standard L:long XL:extra long

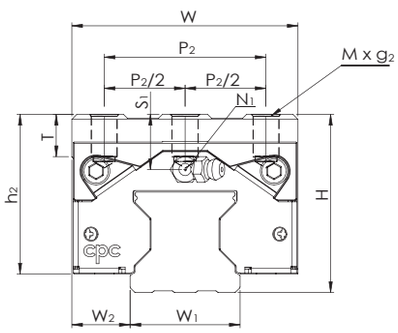
Block width: M:standard F:flanged

Block type: 35, 45

U: Rail (tapped from the bottom)

Product type: ARR: Low Profile Type HRR: High Profile Type LRR: Extremely Low Profile Type

Dimensions Table



ARR MN/ML/MXL Series

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)											
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P1/2	P2	P2/2	P3	Mxg2	M1	T
ARR 35MN	48	18	34	31	40	14x9x17	70	122	84	42	50	-	50	25	50	M8x13	-	13
ARR 35ML	48	18	34	31	40	14x9x17	70	147.5	109.5	42	72	-	50	25	72	M8x13	-	13
ARR 45MN	60	20.5	45	38	52.5	20x14x17	86	156	110	52	60	-	60	30	60	M10x17	-	13
ARR 45ML	60	20.5	45	38	52.5	20x14x17	86	191	145	52	80	-	60	30	80	M10x17	-	13

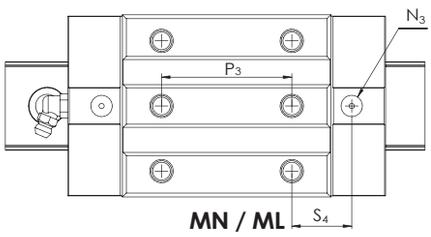
HRR MN/ML/MXL Series

HRR 35MN	55	18	34	31	40	14x9x17	70	122	84	49	50	-	50	25	50	M8x16	-	13
HRR 35ML	55	18	34	31	40	14x9x17	70	147.5	109.5	49	72	-	50	25	72	M8x16	-	13
HRR 35MXL	55	18	34	31	40	14x9x17	70	177.5	139.5	49	100	50	50	25	100	M8x16	-	13
HRR 45MN	70	20.5	45	38	52.5	20x14x17	86	156	110	62	60	-	60	30	60	M10x20	-	13
HRR 45ML	70	20.5	45	38	52.5	20x14x17	86	191	145	62	80	-	60	30	80	M10x20	-	13
HRR 45MXL	70	20.5	45	38	52.5	20x14x17	86	226	180	62	120	60	60	30	120	M10x20	-	13

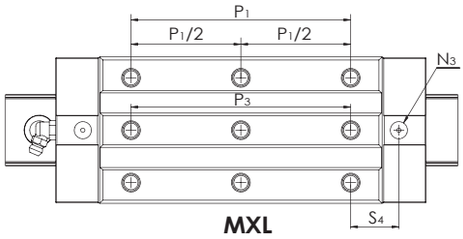
LRR MN/ML/MXL Series

LRR 35MN	44	18	34	31	40	14x9x17	70	122	84	38	50	-	50	25	50	M8x9	-	9
LRR 35ML	44	18	34	31	40	14x9x17	70	147.5	109.5	38	72	-	50	25	72	M8x9	-	9
LRR 35MXL	44	18	34	31	40	14x9x17	70	177.5	139.5	38	100	50	50	25	100	M8x9	-	9
LRR 45MN	52	20.5	45	38	52.5	20x14x17	86	156	110	44	60	-	60	30	60	M10x11	-	10
LRR 45ML	52	20.5	45	38	52.5	20x14x17	86	191	145	44	80	-	60	30	80	M10x11	-	10
LRR 45MXL	52	20.5	45	38	52.5	20x14x17	86	226	180	44	120	60	60	30	120	M10x11	-	10

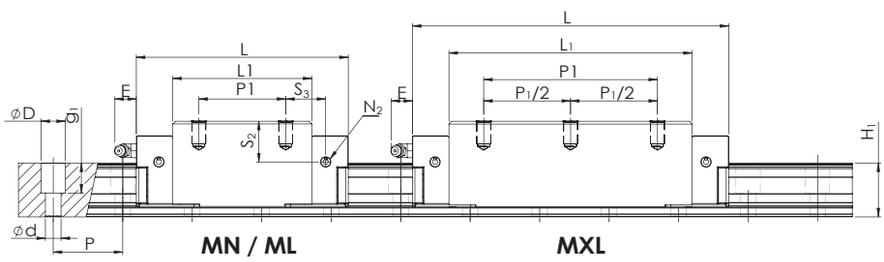
1. N_2 = Injecting holes
2. N_3 = O-ring size for lubrication from above
3. N_2 ,N_3 will be sealed before shipmant, please open it when first using the product.



MN / ML

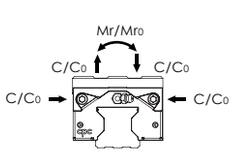


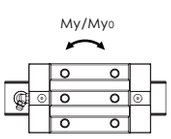
MXL

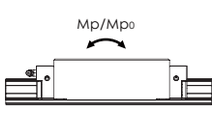


MN / ML MXL

Block Dimensions(mm)								Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
N_1	N_2	N_3	E	S_1	S_2	S_3	S_4	$C_{ISO\ 100km}$	C_0	Mr_0	Mp_0	My_0	Block(g)	Rail(g/m)	
M6x12	M6x8	P5	12	10	16.4	25	25	57	154	2742	1946	1946	1200	5740	ARR 35MN
M6x12	M6x8	P5	12	10	16.4	26.7	26.7	68.9	196	3525	3226	3226	1750	5740	ARR 35ML
M6x12	M6x8	P5	12	14.6	21.8	39.2	36	95.9	255	6350	4450	4450	2600	10000	ARR 45MN
M6x12	M6x8	P5	12	14.6	21.8	46.7	43.5	118	333	8450	7700	7700	3350	10000	ARR 45ML
M6x12	M6x8	P5	12	17	23.4	25	25	57	154	2742	1946	1946	1720	5740	HRR 35MN
M6x12	M6x8	P5	12	17	23.4	26.7	26.7	68.9	196	3525	3226	3226	2100	5740	HRR 35ML
M6x12	M6x8	P5	12	17	23.4	27.7	27.7	82	245	4439	5111	5111	2700	5740	HRR 35MXL
M6x12	M6x8	P5	12	24.6	31.8	39.2	36	95.9	255	6350	4450	4450	3400	10000	HRR 45MN
M6x12	M6x8	P5	12	24.6	31.8	46.7	43.5	118	333	8450	7700	7700	4300	10000	HRR 45ML
M6x12	M6x8	P5	12	24.6	31.8	44.2	41	138	410	10500	11800	11800	5200	10000	HRR 45MXL
M6x12	M6x8	P5	12	6	12.4	25	25	57	154	2742	1946	1946	1100	5740	LRR 35MN
M6x12	M6x8	P5	12	6	12.4	26.7	26.7	68.9	196	3525	3226	3226	1500	5740	LRR 35ML
M6x12	M6x8	P5	12	6	12.4	27.7	27.7	82	245	4439	5111	5111	1900	5740	LRR 35MXL
M6x12	M6x8	P5	12	6.6	13.8	39.2	36	95.9	255	6350	4450	4450	2100	10000	LRR 45MN
M6x12	M6x8	P5	12	6.6	13.8	46.7	43.5	118	333	8450	7700	7700	2700	10000	LRR 45ML
M6x12	M6x8	P5	12	6.6	13.8	44.2	41	138	410	10500	11800	11800	3200	10000	LRR 45MXL

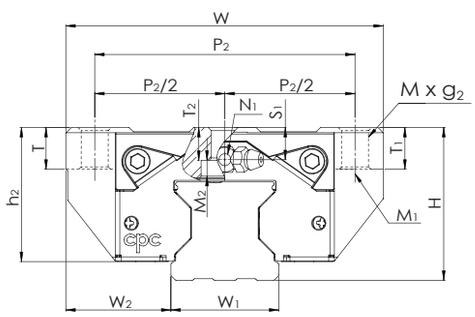






The above rating load capacities and static moments are calculated according to the ISO14728 standard. The rating life for basic dynamic load ratings is defined as the total 100km travel distance for 90% of a group of identical linear guides, under the same conditions and free from any material damage caused by rolling fatigue. If a standard of 50km travel distance is applied to measure the average product lifespan, the above basic dynamic load rating C should be multiplied by 1.26 for an accurate conversion.

Dimensions Table



HRR FN/FL/FXL Series

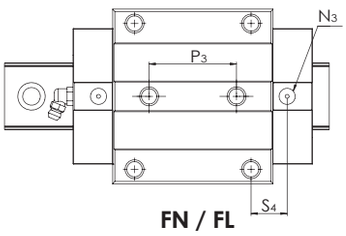
Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)													
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P1/2	P2	P2/2	P3	Mxg2	M1	M2	T	T1
HRR 35FN	48	33	34	31	40	14x9x17	100	122	84	42	62	-	82	41	52	M10x13	M8	5	13	13
HRR 35FL	48	33	34	31	40	14x9x17	100	147.5	109.5	42	62	-	82	41	52	M10x13	M8	5	13	13
HRR 35FXL	48	33	34	31	40	14x9x17	100	177.5	139.5	42	100	50	82	41	100	M10x13	M8	5	13	13
HRR 45FN	60	37.5	45	38	52.5	20x14x17	120	156	110	52	80	-	100	50	60	M12x15	M10	6	15	15
HRR 45FL	60	37.5	45	38	52.5	20x14x17	120	191	145	52	80	-	100	50	60	M12x15	M10	6	15	15
HRR 45FXL	60	37.5	45	38	52.5	20x14x17	120	226	180	52	120	60	100	50	120	M12x15	M10	6	15	15

LRR FN/FL/FXL Series

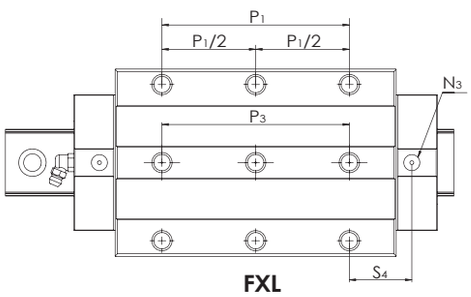
LRR 35FN	44	33	34	31	40	14x9x17	100	122	84	38	62	-	82	41	52	M10x13	M8	5	9	13
LRR 35FL	44	33	34	31	40	14x9x17	100	147.5	109.5	38	62	-	82	41	52	M10x13	M8	5	9	13
LRR 35FXL	44	33	34	31	40	14x9x17	100	177.5	139.5	38	100	50	82	41	100	M10x13	M8	5	9	13
LRR 45FN	52	37.5	45	38	52.5	20x14x17	120	156	110	44	80	-	100	50	60	M12x15	M10	6	10	15
LRR 45FL	52	37.5	45	38	52.5	20x14x17	120	191	145	44	80	-	100	50	60	M12x15	M10	6	10	15
LRR 45FXL	52	37.5	45	38	52.5	20x14x17	120	226	180	44	120	60	100	50	120	M12x15	M10	6	10	15

1. The load capacity is measured for the full-ball type (without ball chain)
2. N_2 = Injecting holes
3. N_3 = O-ring size for lubrication from above
4. N_2 ,N_3 will be sealed before shipmant, please open it when first using the product.
5. Mxg^2, M1: Screw size based on ISO 4762-12.9
6. M_2 abdomen countersunk head screw size according to DIN 7984-8.8

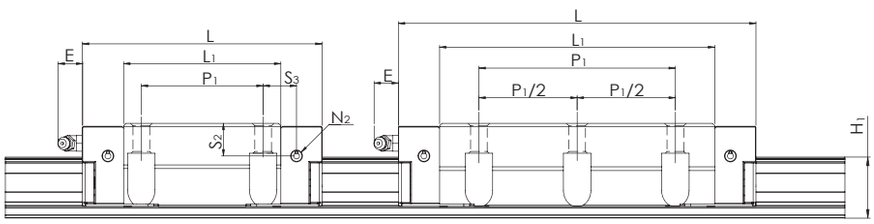
LINEAR MOTION TECHNOLOGY



FN / FL



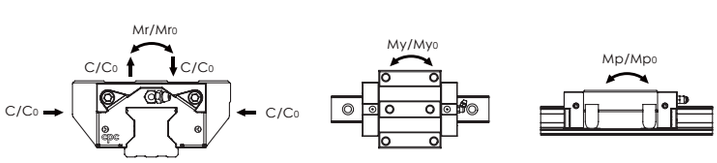
FXL



FN / FL **FXL**

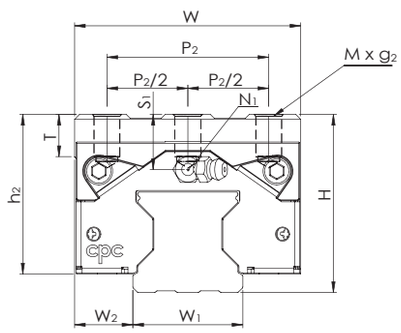
Block Dimensions(mm)									Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
T2	N1	N2	N3	E	S1	S2	S3	S4	CISO 100km	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
10.2	M6x12	M6x8	P5	12	10	16.4	19	19	57	154	2742	1946	1946	1700	5740	HRR 35FN
10.2	M6x12	M6x8	P5	12	10	16.4	31.7	31.7	68.9	196	3525	3226	3226	2400	5740	HRR 35FL
10.2	M6x12	M6x8	P5	12	10	16.4	27.7	27.7	82	245	4439	5111	5111	3100	5740	HRR 35FXL
14.8	M6x12	M6x8	P5	12	14.6	21.8	29.2	26	95.9	255	6350	4450	4450	3600	10000	HRR 45FN
14.8	M6x12	M6x8	P5	12	14.6	21.8	46.7	43.5	118	333	8450	7700	7700	4700	10000	HRR 45FL
14.8	M6x12	M6x8	P5	12	14.6	21.8	44.2	41	138	410	10500	11800	11800	5750	10000	HRR 45FXL

6.7	M6x12	M6x8	P5	12	6	12.4	19	19	57	154	2742	1946	1946	1550	5740	LRR 35FN
6.7	M6x12	M6x8	P5	12	6	12.4	31.7	31.7	68.9	196	3525	3226	3226	2200	5740	LRR 35FL
6.7	M6x12	M6x8	P5	12	6	12.4	27.7	27.7	82	245	4439	5111	5111	2800	5740	LRR 35FXL
7.3	M6x12	M6x8	P5	12	6.6	13.8	29.2	26	95.9	255	6350	4450	4450	2900	10000	LRR 45FN
7.3	M6x12	M6x8	P5	12	6.6	13.8	46.7	43.5	118	333	8450	7700	7700	3800	10000	LRR 45FL
7.3	M6x12	M6x8	P5	12	6.6	13.8	44.2	41	138	410	10500	11800	11800	4500	10000	LRR 45FXL



The above rating load capacities and static moments are calculated according to the ISO14728 standard. The rating life for basic dynamic load ratings is defined as the total 100km travel distance for 90% of a group of identical linear guides, under the same conditions and free from any material damage caused by rolling fatigue. If a standard of 50km travel distance is applied to measure the average product lifespan, the above basic dynamic load rating C should be multiplied by 1.26 for an accurate conversion.

Dimensions Table



ARR MN/ML/MXL...C Series (Ball chain type)

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)											
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P1/2	P2	P2/2	P3	Mxg2	M1	T
ARR 35MN	48	18	34	31	40	14x9x17	70	122	84	42	50	-	50	25	50	M8x13	-	13
ARR 35ML	48	18	34	31	40	14x9x17	70	147.5	109.5	42	72	-	50	25	72	M8x13	-	13
ARR 45MN	60	20.5	45	38	52.5	20x14x17	86	156	110	52	60	-	60	30	60	M10x17	-	13
ARR 45ML	60	20.5	45	38	52.5	20x14x17	86	191	145	52	80	-	60	30	80	M10x17	-	13

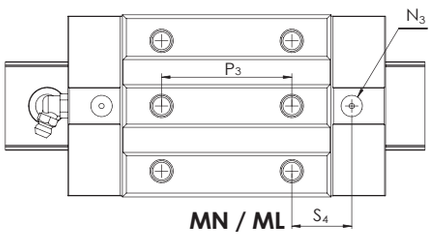
HRR MN/ML/MXL...C Series (Ball chain type)

HRR 35MN	55	18	34	31	40	14x9x17	70	122	84	49	50	-	50	25	50	M8x16	-	13
HRR 35ML	55	18	34	31	40	14x9x17	70	147.5	109.5	49	72	-	50	25	72	M8x16	-	13
HRR 35MXL	55	18	34	31	40	14x9x17	70	177.5	139.5	49	100	50	50	25	100	M8x16	-	13
HRR 45MN	70	20.5	45	38	52.5	20x14x17	86	156	110	62	60	-	60	30	60	M10x20	-	13
HRR 45ML	70	20.5	45	38	52.5	20x14x17	86	191	145	62	80	-	60	30	80	M10x20	-	13
HRR 45MXL	70	20.5	45	38	52.5	20x14x17	86	226	180	62	120	60	60	30	120	M10x20	-	13

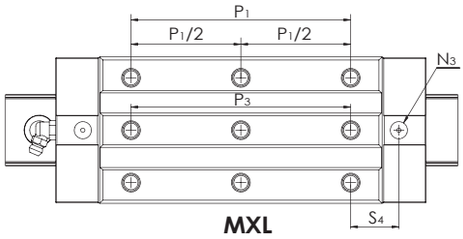
LRR MN/ML/MXL...C Series (Ball chain type)

LRR 35MN	44	18	34	31	40	14x9x17	70	122	84	38	50	-	50	25	50	M8x9	-	9
LRR 35ML	44	18	34	31	40	14x9x17	70	147.5	109.5	38	72	-	50	25	72	M8x9	-	9
LRR 35MXL	44	18	34	31	40	14x9x17	70	177.5	139.5	38	100	50	50	25	100	M8x9	-	9
LRR 45MN	52	20.5	45	38	52.5	20x14x17	86	156	110	44	60	-	60	30	60	M10x11	-	10
LRR 45ML	52	20.5	45	38	52.5	20x14x17	86	191	145	44	80	-	60	30	80	M10x11	-	10
LRR 45MXL	52	20.5	45	38	52.5	20x14x17	86	226	180	44	120	60	60	30	120	M10x11	-	10

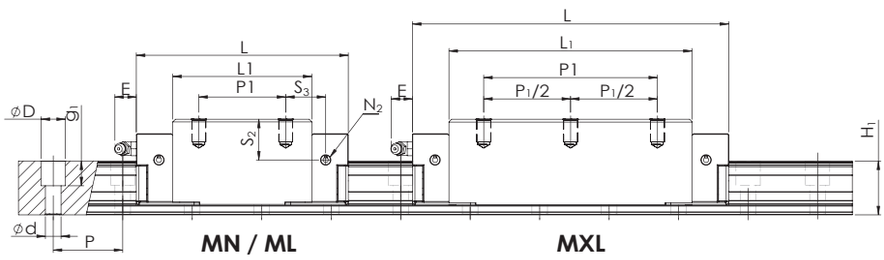
1. N_2 = Injecting holes
2. N_3 = O-ring size for lubrication from above
3. N_2 ,N_3 will be sealed before shipmant, please open it when first using the product.



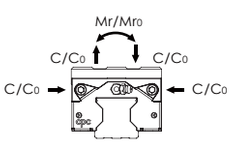
MN / ML

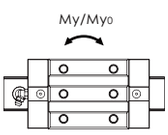


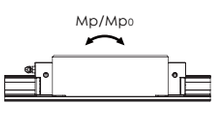
MXL



Block Dimensions(mm)								Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
N1	N2	N3	E	S1	S2	S3	S4	Ccage 100km	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
M6x12	M6x8	P5	12	10	16.4	25	25	71.3	133	2350	1710	1710	1200	5740	ARR 35MN
M6x12	M6x8	P5	12	10	16.4	26.7	26.7	86.1	175	3133	2881	2881	1750	5740	ARR 35ML
M6x12	M6x8	P5	12	14.6	21.8	39.2	36	120	222	5750	4050	4050	2600	10000	ARR 45MN
M6x12	M6x8	P5	12	14.6	21.8	46.7	43.5	147.5	288	7550	6900	6900	3350	10000	ARR 45ML
M6x12	M6x8	P5	12	17	23.4	25	25	71.3	133	2350	1710	1710	1720	5740	HRR 35MN
M6x12	M6x8	P5	12	17	23.4	26.7	26.7	86.1	175	3133	2881	2881	2100	5740	HRR 35ML
M6x12	M6x8	P5	12	17	23.4	27.7	27.7	102.5	224	4047	4695	4695	2700	5740	HRR 35MXL
M6x12	M6x8	P5	12	24.6	31.8	39.2	36	120	222	5750	4050	4050	3400	10000	HRR 45MN
M6x12	M6x8	P5	12	24.6	31.8	46.7	43.5	147.5	288	7550	6900	6900	4300	10000	HRR 45ML
M6x12	M6x8	P5	12	24.6	31.8	44.2	41	172.5	366	9650	10850	10850	5200	10000	HRR 45MXL
M6x12	M6x8	P5	12	6	12.4	25	25	71.3	133	2350	1710	1710	1100	5740	LRR 35MN
M6x12	M6x8	P5	12	6	12.4	26.7	26.7	86.1	175	3133	2881	2881	1500	5740	LRR 35ML
M6x12	M6x8	P5	12	6	12.4	27.7	27.7	102.5	224	4047	4695	4695	1900	5740	LRR 35MXL
M6x12	M6x8	P5	12	6.6	13.8	39.2	36	120	222	5750	4050	4050	2100	10000	LRR 45MN
M6x12	M6x8	P5	12	6.6	13.8	46.7	43.5	147.5	288	7550	6900	6900	2700	10000	LRR 45ML
M6x12	M6x8	P5	12	6.6	13.8	44.2	41	172.5	366	9650	10850	10850	3200	10000	LRR 45MXL

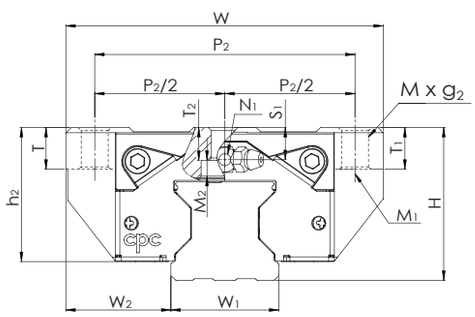






The measured value is the dynamic load rating value with ball chain Ccage. The above static load rating and the static moment are calculated according to the ISO 14728 standard.

Dimensions Table



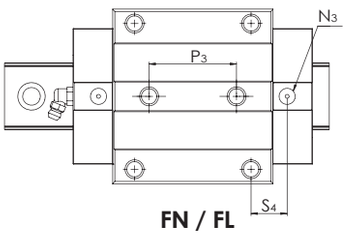
HRR FN/FL/FXL...C Series (Ball chain type)

Model Code	Mounting Dimensions		Rail Dimensions(mm)				Block Dimensions(mm)													
	H	W2	W1	H1	P	Dxdxg1	W	L	L1	h2	P1	P1/2	P2	P2/2	P3	Mxg2	M1	M2	T	T1
HRR 35FN	48	33	34	31	40	14x9x17	100	122	84	42	62	-	82	41	52	M10x13	M8	5	13	13
HRR 35FL	48	33	34	31	40	14x9x17	100	147.5	109.5	42	62	-	82	41	52	M10x13	M8	5	13	13
HRR 35FXL	48	33	34	31	40	14x9x17	100	177.5	139.5	42	100	50	82	41	100	M10x13	M8	5	13	13
HRR 45FN	60	37.5	45	38	52.5	20x14x17	120	156	110	52	80	-	100	50	60	M12x15	M10	6	15	15
HRR 45FL	60	37.5	45	38	52.5	20x14x17	120	191	145	52	80	-	100	50	60	M12x15	M10	6	15	15
HRR 45FXL	60	37.5	45	38	52.5	20x14x17	120	226	180	52	120	60	100	50	120	M12x15	M10	6	15	15

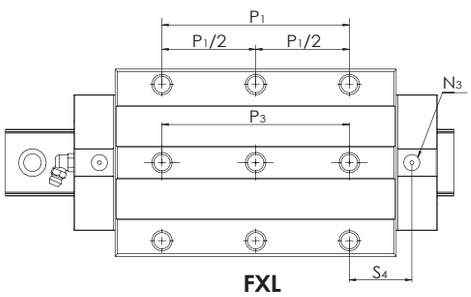
LRR FN/FL/FXL...C Series (Ball chain type)

LRR 35FN	44	33	34	31	40	14x9x17	100	122	84	38	62	-	82	41	52	M10x9	M8	5	9	13
LRR 35FL	44	33	34	31	40	14x9x17	100	147.5	109.5	38	62	-	82	41	52	M10x9	M8	5	9	13
LRR 35FXL	44	33	34	31	40	14x9x17	100	177.5	139.5	38	100	50	82	41	100	M10x9	M8	5	9	13
LRR 45FN	52	37.5	45	38	52.5	20x14x17	120	156	110	44	80	-	100	50	60	M12x15	M10	6	10	15
LRR 45FL	52	37.5	45	38	52.5	20x14x17	120	191	145	44	80	-	100	50	60	M12x15	M10	6	10	15
LRR 45FXL	52	37.5	45	38	52.5	20x14x17	120	226	180	44	120	60	100	50	120	M12x15	M10	6	10	15

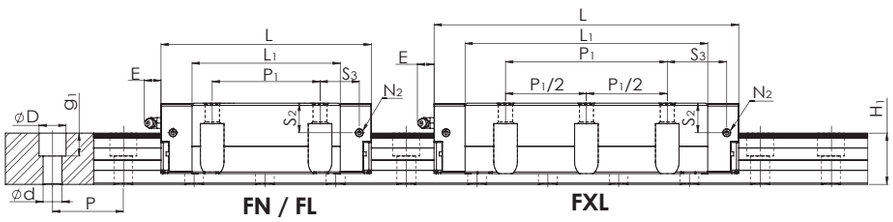
1. N_2 = Injecting holes
2. N_3 = O-ring size for lubrication from above
3. N_2 ,N_3 will be sealed before shipmant, please open it when first using the product.
4. Mxg^2, M1: Screw size based on ISO 4762-12.9
5. M_2 abdomen countersunk head screw size according to DIN 7984-8.8



FN / FL



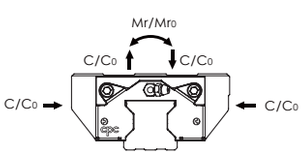
FXL

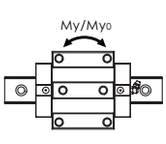


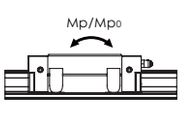
FN / FL **FXL**

Block Dimensions(mm)									Load Capacities (KN)		Static Moment (Nm)			Weight		Model Code
T_2	N_1	N_2	N_3	E	S_1	S_2	S_3	S_4	C_{cage} 100km	C_0	Mr_0	Mp_0	My_0	Block(g)	Rail(g/m)	
10.2	M6x12	M6x8	P5	12	10	16.4	19	19	71.3	133	2350	1710	1710	1700	5740	HRR 35FN
10.2	M6x12	M6x8	P5	12	10	16.4	31.7	31.7	86.1	175	3133	2881	2881	2400	5740	HRR 35FL
10.2	M6x12	M6x8	P5	12	10	16.4	27.7	27.7	102.5	224	4047	4695	4695	3100	5740	HRR 35FXL
14.8	M6x12	M6x8	P5	12	14.6	21.8	29.2	26	120	222	5750	4050	4050	3600	10000	HRR 45FN
14.8	M6x12	M6x8	P5	12	14.6	21.8	46.7	43.5	147.5	288	7550	6900	6900	4700	10000	HRR 45FL
14.8	M6x12	M6x8	P5	12	14.6	21.8	44.2	41	172.5	366	9650	10850	10850	5750	10000	HRR 45FXL

6.7	M6x12	M6x8	P5	12	6	12.4	19	19	71.3	133	2350	1710	1710	1550	5740	LRR 35FN
6.7	M6x12	M6x8	P5	12	6	12.4	31.7	31.7	86.1	175	3133	2881	2881	2200	5740	LRR 35FL
6.7	M6x12	M6x8	P5	12	6	12.4	27.7	27.7	102.5	224	4047	4695	4695	2800	5740	LRR 35FXL
7.3	M6x12	M6x8	P5	12	6.6	13.8	29.2	26	120	222	5750	4050	4050	2900	10000	LRR 45FN
7.3	M6x12	M6x8	P5	12	6.6	13.8	46.7	43.5	147.5	288	7550	6900	6900	3800	10000	LRR 45FL
7.3	M6x12	M6x8	P5	12	6.6	13.8	44.2	41	172.5	366	9650	10850	10850	4500	10000	LRR 45FXL







The measured value is the dynamic load rating value with ball chain Ccage. The above static load rating and the static moment are calculated according to the ISO 14728 standard.