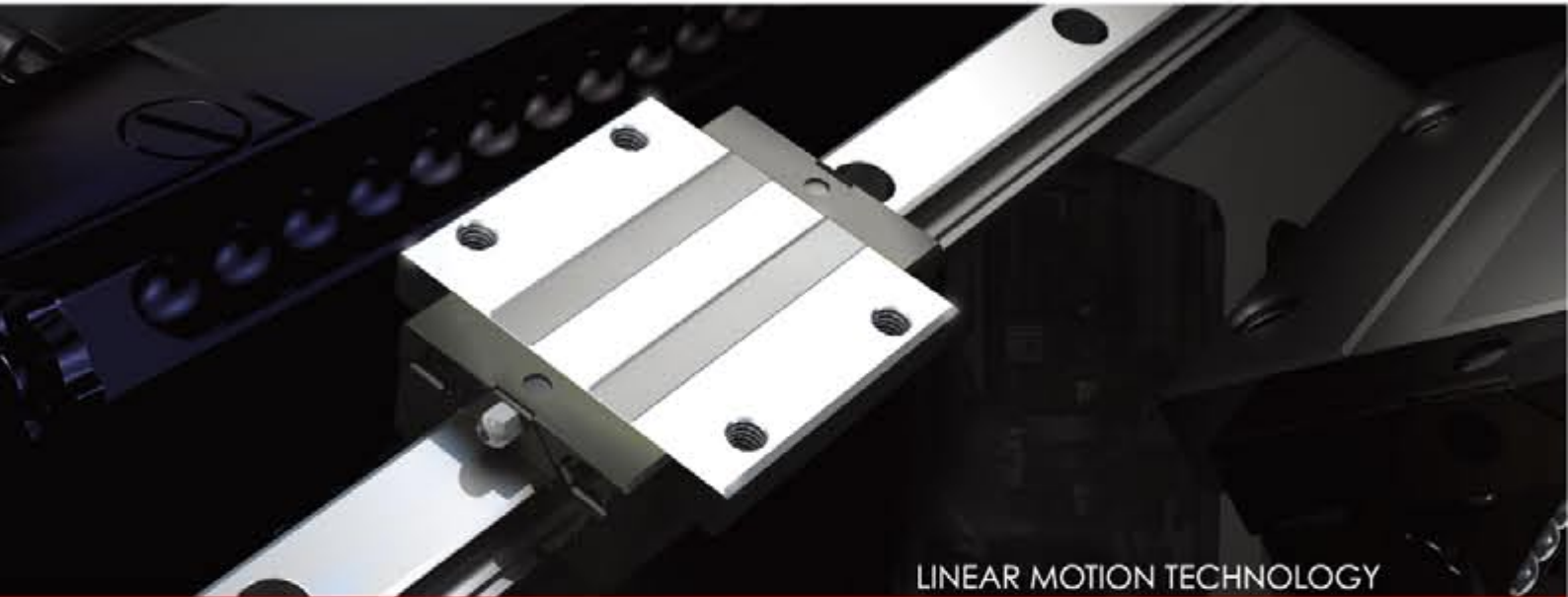


cpc



LINEAR MOTION TECHNOLOGY

2008 CATALOG

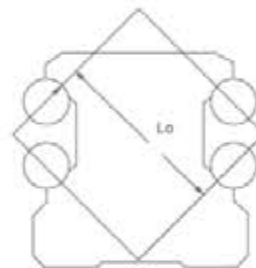
AR/HR Ball Type Linear Guide Series

IMPEX
EN
IMPEX TECNICHE LINEARI

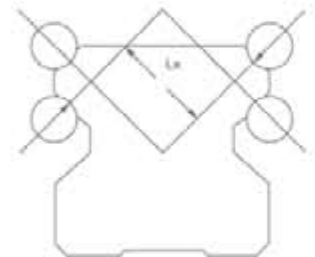
IMPEX TECNICHE LINEARI SRL
Via Jacopone da Todi, 14 · IT-06089 Torgiano PG
T: +39 075 98 80 100 · F: +39 075 98 80 103
info@movitec.it · www.movitec.it

◎ AR/HR Ball Type Linear Guide Series

CPC's AR/HR Ball Type Linear Guide Series design incorporates four rows of re-circulating steel balls arranged in the O-type in a 45° contact angle with the raceway, which dramatically increases the rigidity and torsion (shockabsorption) of the track rail. Although it is limited by the dimensions of the raceway, the design incorporates larger diameters and higher amounts of steel balls to provide higher load capacities, moments and rigidity.

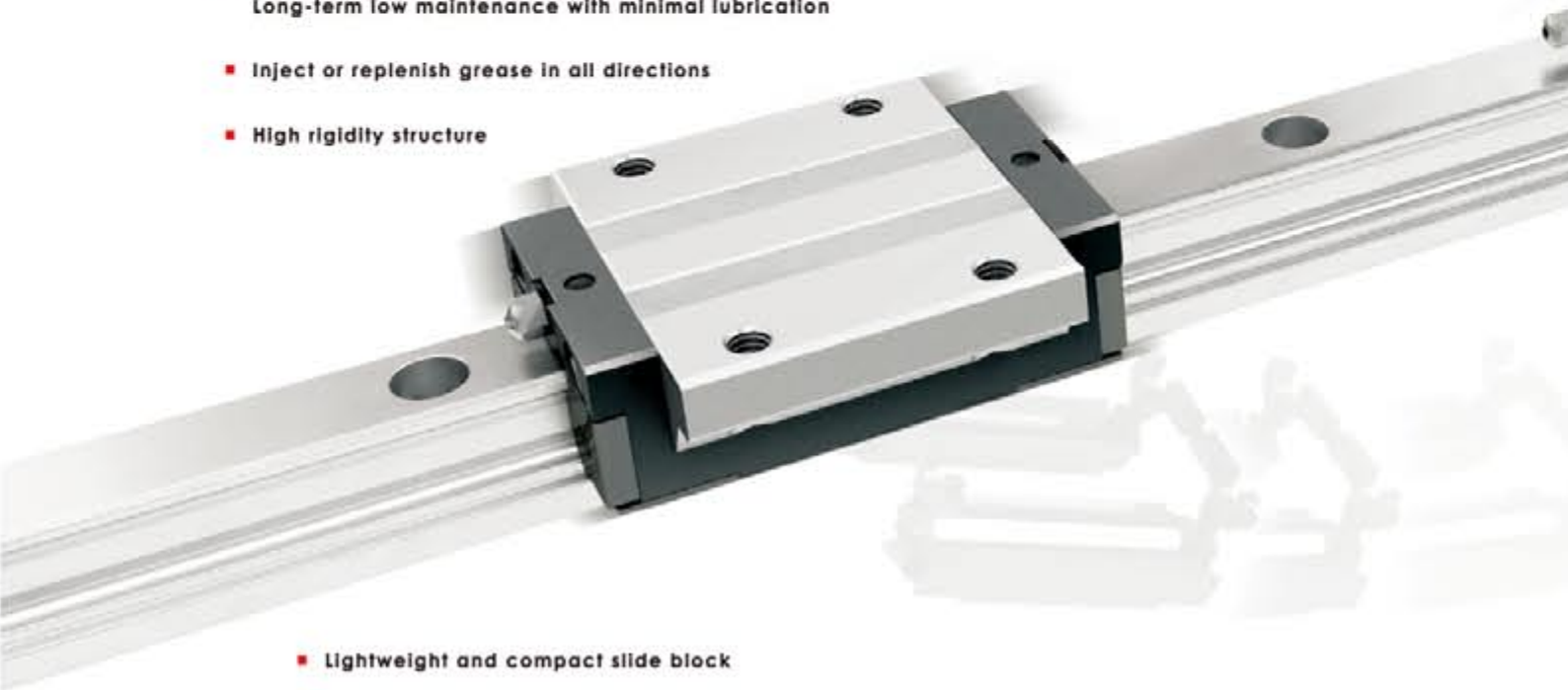


O Type-Arrangement



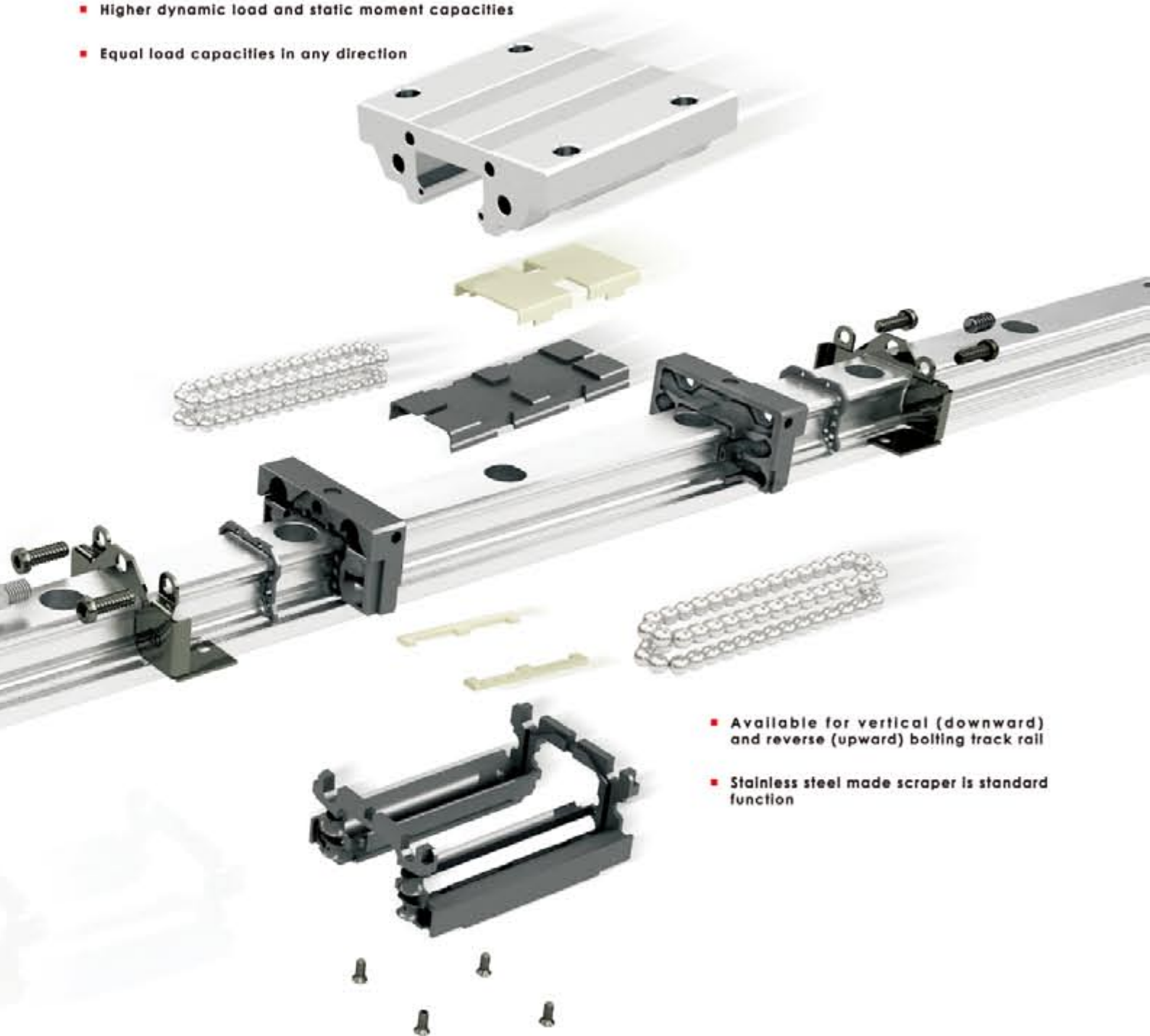
X Type-Arrangement

- Ecology lubrication design : Ecology System
Long-term low maintenance with minimal lubrication
- Inject or replenish grease in all directions
- High rigidity structure



- Lightweight and compact slide block
- Interchangeability

- Excellent dynamic function: $V_{max} > 5 \text{ m/s}$, $a_{max} > 300 \text{ m/s}^2$
- Higher dynamic load and static moment capacities
- Equal load capacities in any direction



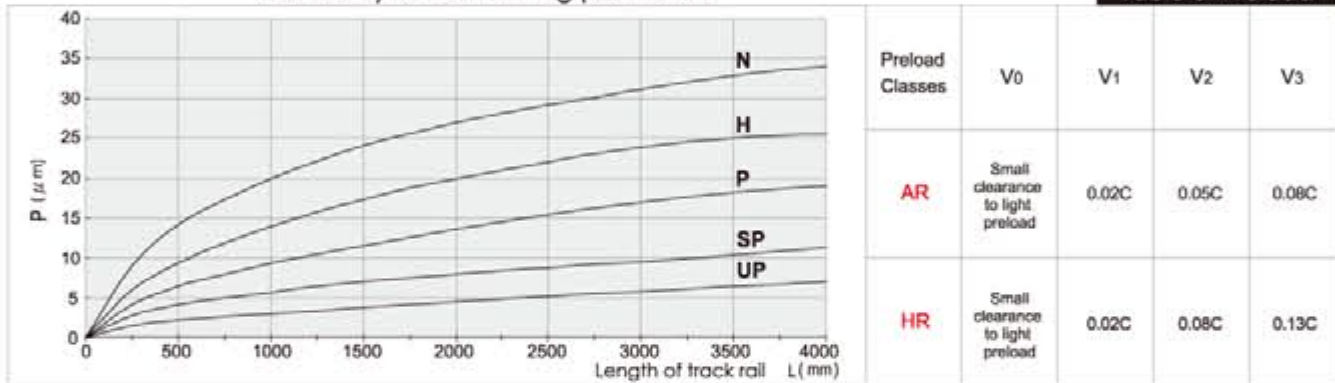
- Available for vertical (downward) and reverse (upward) bolting track rail
- Stainless steel made scraper is standard function

- Dust protection of double wipe blade design in the end seal; have Standard type and reinforcement type
- Available for special treatment of surface

◎ Accuracy

		Accuracy classes					
		Ultra Precision (UP)	Super Precision (SP)	Precision (P)	High (H)	Ordinary (N)	
	Accuracy Classes (μm)						
	Tolerance of dimension height	H	±5	±10	±20	±40	±100
	Variation of height for different runner block on the same position of track rail	ΔH	3	5	7	15	30
	Tolerance of dimension width	W ₂	±5	±7	±10	±20	±40
	Variation of width for different runner block on the same position of track rail	ΔW ₂	3	5	7	15	30

Accuracy of the running parallelism



◎ Order information

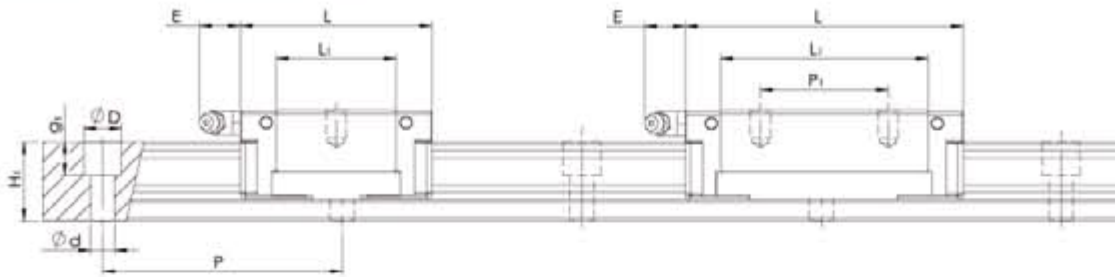
Model Code														
AR(U)	E	15	M	N	B	2	Z	V1	P	-1480L	-20	-20	II	J
Customization code														
Number of rail on the same moving axis														
End hole pitch (mm)														
Starting hole pitch (mm)														
Rail length (mm)														
Accuracy classes Ordinary(N), High(H), Precision(P), Super Precision(SP), Ultra Precision(UP)														
Preload classes V0: Standard, V1: Light Preload, V2: Medium preload, V3: Heavy preload														
Embedded lubrication storage														
Block quantity Quantity of the runner block														
End seal type B: Standard, S: Reinforcement														
Block length L: Long, N: Standard, S: Short														
Block type M: Standard, F: Wide														
Rail size The code of track rail size: 15, 20, 25														
E The track rail size 15 mounting hole 6 x 3.5 x 4.5														
Product Type – AR: automation series, HR: heavy Load series, U: Upward bolting track rail														

>> Customization code

The meaning of suffix characters:

- J** Built-jointing track rail
- G** Customer designate lubricant
- I** Inspection report
- C** Chromium surface treatment is applied to the casing and track rail
- CR** Chromium surface treatment is applied to the track rail
- M** Manganese surface treatment is applied to the block and track rail
- MR** Manganese surface treatment is applied to the track rail
- R** Special process for track rail
- B** Special process for slide block

⊙ Dimensions and specification

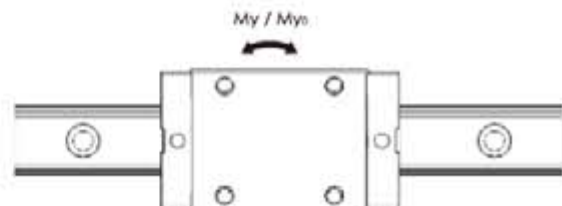
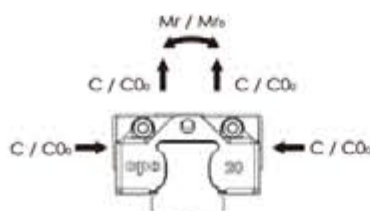


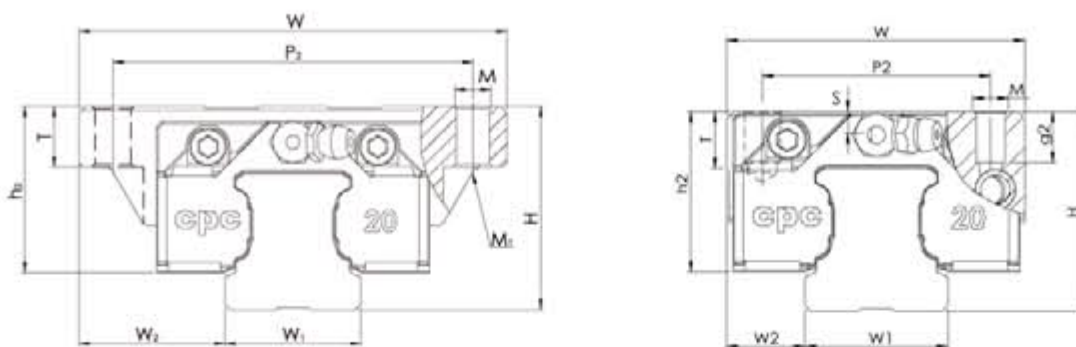
AR Automation Series

Model Code	Fabrication Dimension		Rail Dimension (mm)				Block Dimension (mm)						Block Dimension		
	H	W ₂	W ₁	H ₁	P	D×d×g ₁	W	L	L ₁	h ₂	P ₁	P ₂	E	M×g ₂	M ₁
AR 15 MS	24	9.5	15	15	60	7.5x4.5x5.3 (6x3.5x4.5)	34	40.8	24.2	20.1	-	26	10	M4x7	
AR 15 MN	24	9.5	15	15	60		34	56.1	39.5	20.1	26	26	10	M4x7	
AR 15 FS	24	18.5	15	15	60		52	40.8	24.2	20.1	-	41	10	M5x6	M4
AR 15 FN	24	18.5	15	15	60		52	56.1	39.5	20.1	26	41	10	M5x6	M4
AR 20 MS	28	11	20	20.3	60	9.5x6x8.5	42	48.2	30	22.5	-	32	10	M5x6.5	
AR 20 MN	28	11	20	20.3	60		42	70.2	52	22.5	32	32	10	M5x6.5	
AR 20 FS	28	19.5	20	20.3	60		59	48.2	30	22.5	-	49	10	M6x9	M5
AR 20 FN	28	19.5	20	20.3	60		59	70.2	52	22.5	32	49	10	M6x9	M5
AR 25 MS	33	12.5	23	24	60	11x7x9	48	57.2	37	26.6	-	35	12	M6x7.5	
AR 25 MN	33	12.5	23	24	60		48	80.2	60	26.6	35	35	12	M6x7.5	
AR 25 FS	33	25	23	24	60		73	57.2	37	26.6	-	60	12	M8x9	M6
AR 25 FN	33	25	23	24	60		73	80.2	60	26.6	35	60	12	M8x9	M6

HR Heavy Load Series

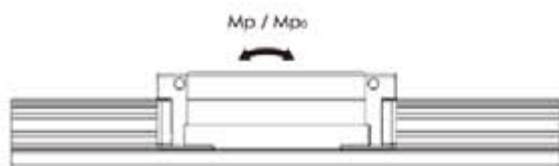
Model Code	Fabrication Dimension		Rail Dimension (mm)				Block Dimension (mm)						Block Dimension		
	H	W ₂	W ₁	H ₁	P	D×d×g ₁	W	L	L ₁	h ₂	P ₁	P ₂	E	M×g ₂	M ₁
HR 15 MN	28	9.5	15	15	60	7.5x4.5x5.3 (6x3.5x4.5)	34	56.1	39.5	24.1	26	26	10	M4x7	
HR 15 FN	24	16	15	15	60		47	56.1	39.5	20.1	30	38	10	M5x9	
HR 20 MN	30	12	20	20.3	60	9.5x6x8.5	44	70.2	52	24.5	36	32	10	M5x8.5	
HR 20 ML	30	12	20	20.3	60		44	90.2	72	24.5	50	32	10	M5x8.5	
HR 20 FN	30	21.5	20	20.3	60		63	70.2	52	24.5	40	53	10	M6x9	M5
HR 20 FL	30	21.5	20	20.3	60		63	90.2	72	24.5	40	53	10	M6x9	M5
HR 25 MN	40	12.5	23	24	60	11x7x9	48	80.2	60	33.6	35	35	12	M6x9	
HR 25 ML	40	12.5	23	24	60		48	100.2	80	33.6	50	35	12	M6x9	
HR 25 FN	36	23.5	23	24	60		70	80.2	60	29.6	45	57	12	M8x9	M6
HR 25 FL	36	23.5	23	24	60		70	100.2	80	29.6	45	57	12	M8x9	M6





Block Dimension (mm)				Load Capacities (kN)		Static Moment (Nm)			Weight		Model Code
Mxgz	M1	S	T	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
M4x7		4	6	6.40	10.80	80	40	40	95	1290	AR 15 MS
M4x7		4	6	9.00	17.50	140	100	100	140		AR 15 MN
M5x6	M4	4	6	6.40	10.80	80	40	40	120		AR 15 FS
M5x6	M4	4	6	9.00	17.50	140	100	100	180		AR 15 FN
M5x6.5		3.5	7	10.90	16.30	170	80	80	170	2280	AR 20 MS
M5x6.5		3.5	7	15.60	29.80	310	220	220	260		AR 20 MN
M6x9	M5	3.5	9	10.90	16.30	170	80	80	210		AR 20 FS
M6x9	M5	3.5	9	15.60	29.80	310	220	220	360		AR 20 FN
M6x7.5		5	8	12.30	21.20	220	110	110	285	3020	AR 25 MS
M6x7.5		5	8	18.80	36.40	410	300	300	380		AR 25 MN
M8x9	M6	5	10	12.30	21.20	220	110	110	325		AR 25 FS
M8x9	M6	5	10	18.80	36.40	410	300	300	440		AR 25 FN

Block Dimension (mm)				Load Capacities (kN)		Static Moment (Nm)			Weight		Model Code
Mxgz	M1	S	T	C	C0	Mr0	Mp0	My0	Block(g)	Rail(g/m)	
M4x7		8	6	9.00	17.50	140	100	100	185	1290	HR 15 MN
M5x9		4	7	9.00	17.50	140	100	100	180		HR 15 FN
M5x8.5		5.5	7	15.60	29.80	310	220	220	310	2280	HR 20 MN
M5x8.5		5.5	7	20.80	43.30	430	420	420	400		HR 20 ML
M6x9	M5	5.5	9	15.60	29.80	310	220	220	385		HR 20 FN
M6x9	M5	5.5	9	20.80	43.30	430	420	420	505		HR 20 FL
M6x9		12	8	18.80	36.40	410	300	300	530	3020	HR 25 MN
M6x9		12	8	23.40	48.50	560	520	520	665		HR 25 ML
M8x9	M6	8	10	18.80	36.40	410	300	300	470		HR 25 FN
M8x9	M6	8	10	23.40	48.50	560	520	520	585		HR 25 FL



The above rating load capacities and static moment are calculated according to DIN 636 part 2 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 DIN 636 part 2 should be multiply by 1.26 for conversion.