

Product Reference Guide



INA USA CORPORATION



OTHER PRODUCTS

CORPORATE OFFICES

308 SPRINGHILL FARM ROAD
FORT MILL, SOUTH CAROLINA 29715

TELEPHONE (803)548-8500

FAX (803)548-8599

DISTRIBUTOR CUSTOMER SERVICE

TOLL FREE 800-523-6572

FAX (803)548-8594

LINEAR CUSTOMER SERVICE

TOLL FREE 800-462-3399

FAX (215)781-9830

This product section has been excerpted from our full Product Reference Guide to reduce download time. Our complete Product Reference Guide is available in print and on CD-ROM. To receive the full version, please contact your nearest INA Sales Office listed on the last page of this file.



FOREWORD

This publication was designed to serve as a quick reference to the standard product series offered by INA USA Corporation (INA) for its domestic market. The guide provides a current overview of INA products, including basic envelope dimensions and capacities, in one publication – it is not an engineering design guide intended to replace INA engineering catalogs. Consequently, the metric and inch conversions are listed to 3 decimal places for easy reference and rapid identification of correct replacement part(s), not 4 decimal places as necessary for quality control purposes.

This publication can be used to narrow the choices between the many different INA product lines and series for new designs. Detailed engineering information for new designs can be found in our traditional catalogs or by contacting the INA Engineering Department.

A significant portion of INA sales are special production sizes. The identification of those parts is sometimes difficult since a comprehensive listing is beyond the intent of this publication. Special part numbers take as many different forms as the series listed here, but the basic system is to use sequential numbers for each new design. Usually the prefix is F or FC but can include VH, INA or the bearing type such as NA. INA maintains a technical help desk to identify sizes not known or to match competitors' parts.

The toll free 800 numbers listed will give you access to INA Customer Service representatives. These representatives can tap into INA Worldwide resources to provide the bearings you need.

Storage Life

Lubricants age naturally due to environmental influences. It is therefore the user's responsibility to follow the directions given by the lubricant manufacturer.

The greases used in INA rolling bearings have a mineral oil base and experience shows that they can be stored for up to 3 years without deteriorating providing the following important conditions are met.

- Closed storage room
- Temperature between 0°C and 40°C
- Relative atmospheric humidity 65% or less
- Security from chemical agents (vapors, gases, fluids)
- Sealed rolling bearings

The frictional torque can be considerably higher after longer storage periods than in freshly greased bearings and the lubricity of the grease can also have deteriorated.

INA bearings have many optional features available including:

- ISO series of bearings generally include the standard clearance options CN, C2, C3 and C4.
- ISO bearing series include PN, P6 and P5 precision classes.

- Corrotect™ plating is available for most bearing designs. Corrotect is a patented process for zinc-iron and zinc-iron-cobalt plating in a thin layer which can be applied to standard components. The protection exceeds stainless steel and the cost is half. Add suffix RR.
- All sealed bearings are supplied pregreased. In most cases the standard lubricant is Shell Alvania 2 or equivalent. Other greases are available, some at extra cost.
- Unsealed bearings may not be greased when shipped.
- Speed limits as published, are based on oil lubrication for open bearings or grease lubrication for sealed bearings. The speed limits are calculated based on a nominal load and heat balance equation. Higher speeds may be allowed depending on the application.
- Dynamic capacities are published based on INA standard usage of ISO and ABMA formulas. New life theory threshold values are published in other INA publications.
- Life calculations and evaluations can be made from INA engineering based catalogs which are available from your INA Sales Representative.
- Other features are available based on current production volumes including heat stabilization of the rings, matched bearing sets, with oil holes and grooves, etc.

ABMA American Bearing Manufacturers Association

ASTM American Society Of Testing And Materials

DIN Deutsches Institut für Normung e.V.

ISO International Standards Organization

Elges, Andrews and Corrotect are registered trademarks of INA USA Corporation.

Permaglide is a registered trademark and a product of KOLBENSCHMIDT AG, Neckarsulm, also produced in Greensburg, Indiana, USA.

All other products and company names are trademarks or registered trademarks of their respective companies.

ALL RIGHTS RESERVED

INA USA Corporation
308 Springhill Farm Road
Fort Mill, SC 29715

Reproduction of this publication in whole or in part without the express written consent of INA USA Corporation is prohibited.

Although every effort has been made to ensure the accuracy of the information contained in this catalog, INA shall not be liable for any omissions or errors. Purchasers should consult their own testing to determine the suitability of any product for a particular purpose. In no event shall INA be liable for any claims for damages based upon breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.

INA USA Corporation reserves the right to make changes / revisions to specifications contained herein without notice.

©Copyright 1999, 2000 INA USA Corporation



Unitized Compact System

MLFZ SERIES

Rail, Integral Design Carriage

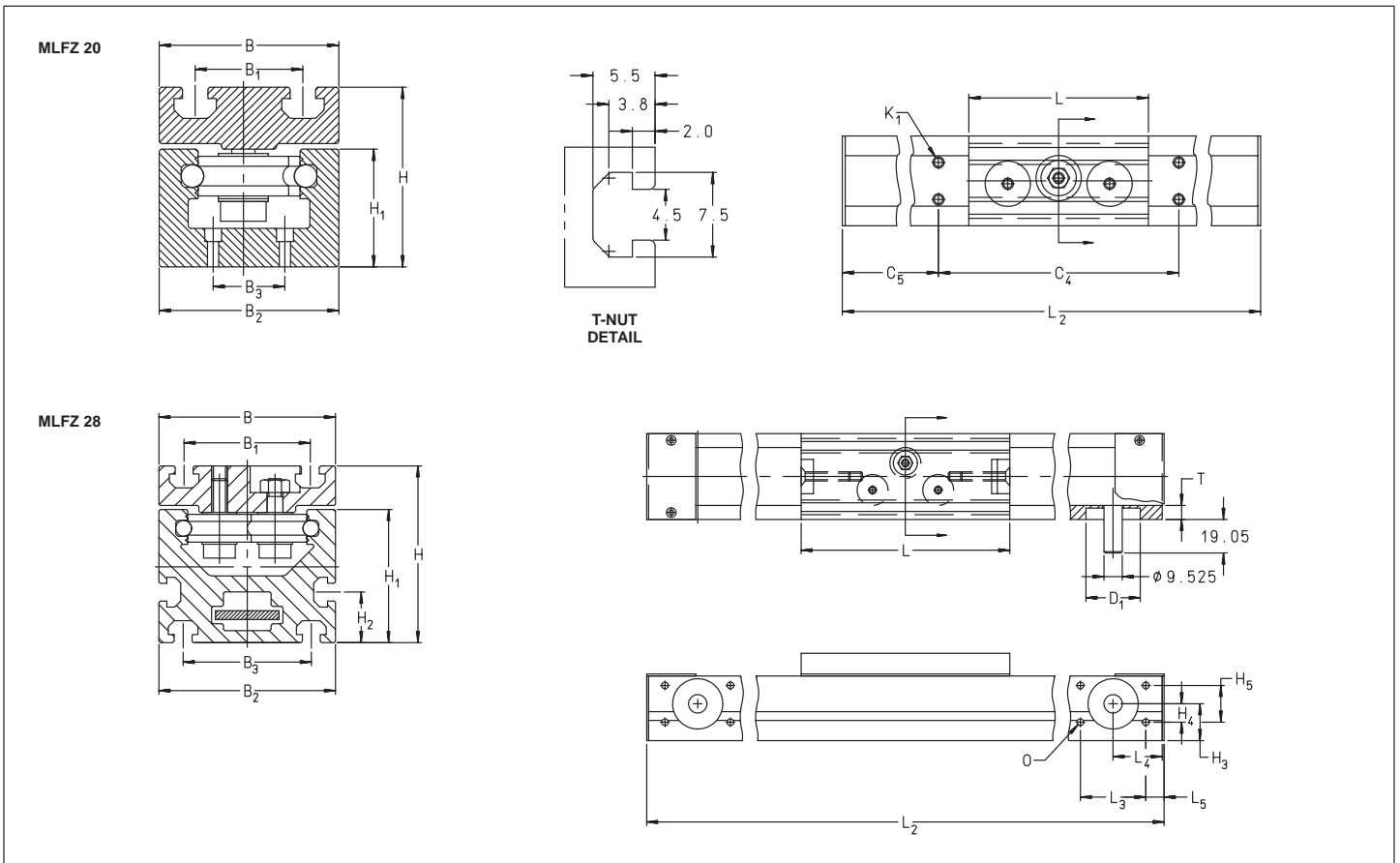
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE – Dimensions in mm																			
PART NUMBER	B	B ₁	B ₂	B ₃	D ₁	H	H ₁	H ₂	H ₃	H ₄	H ₅	K ₁	L	L ₁	L ₃	L ₄	L ₅	O	T
MLFZ 20 MI	31.75	19	31.75	19	–	31.8	20.8	–	–	–	–	#6-32	63.5	–	–	–	–	–	–
MLFZ 28 ZR	44.45	31.75	44.45	31.8	26	44.5	33.5	12.7	19.05	9.53	19.05	–	114.3	60	33.88	25.4	8.46	6-32	1.19

PART NUMBER	WEIGHTS			ALLOWABLE LOADS N				ALLOWABLE MOMENTS Nm						MOMENT OF INERTIA		BELT TYPE
	Go g	G100 g	Gc g	Fy	Foy	Fz	Foz	Mx	Mox	My	Moy	Mz	Moz	Iy mm ⁴	Iz mm ⁴	
MLFZ 20 MI	185	121	105	350	350	300	650	2	2.9	3.5	5.8	5.9	5.9	11950	31880	–
MLFZ 28 ZR	720	215	192	350	350	300	650	3.3	4.9	3.5	5.8	5.9	5.9	62300	159900	16T5

1. For maximum lengths please contact factory.
2. Custom carriages can be provided to suit individual requirements.
3. Load ratings valid for fully supported elements.
4. Load ratings not valid for corrosion resistant series.



Beam Rail

LFSB SERIES

Standard Carriage

LFL SERIES

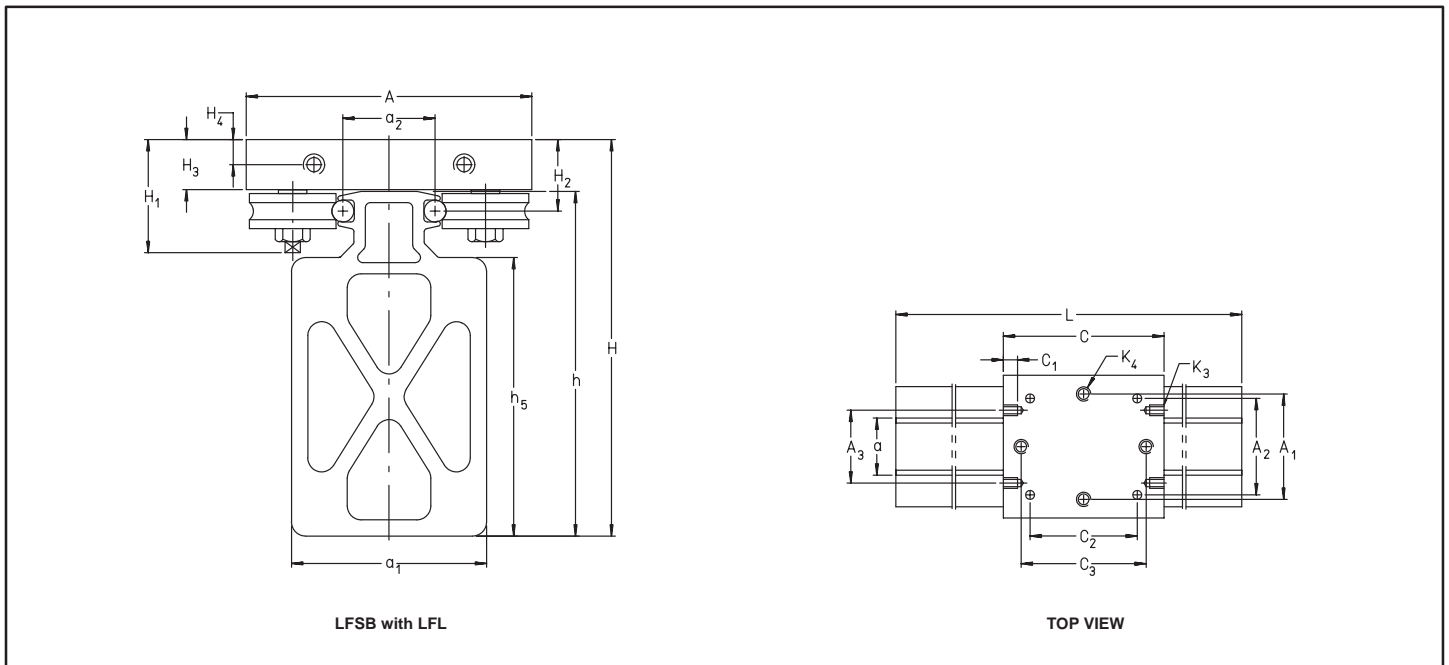
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE – Dimensions in mm																	
PART NUMBER RAIL	WEIGHT g/m	PART NUMBER CARRIAGE	WEIGHT g	DIMENSIONS						LOAD CALCULATIONS							
				CARRIAGE			RAIL			LOAD CURVE ³⁾	ALLOWABLE LOADS		ALLOWABLE MOMENTS			MOMENT OF INERTIA	
				H	A	C	h	a	L ²⁾		Fy N	Fz N	Mx Nm	My Nm	Mz Nm	Iy mm ⁴	Iz mm ⁴
LFSB 32	9970	LFL 90-80	400	135.6	80	90	120.2	32	4000	2	850	1000	11	30	26	1.485 x 10 ⁶	4.72 x 10 ⁶
LFSB 52	18600	LFL 100-120	1000	177.4	120	100	157.2	52	4000	3	1500	2500	33	75	47	5.25 x 10 ⁶	15.9 x 10 ⁶
LFSB 52	18600	LFL 150-155	1900	183.4	135	150	157.2	52	4000	4	2400	4500	51	105	126	5.25 x 10 ⁶	15.9 x 10 ⁶

MOUNTING DIMENSIONS – Dimensions in mm																	
PART NUMBER RAIL	WEIGHT g/m	PART NUMBER CARRIAGE	A ₁	A ₂	A ₃	a ₁	a ₂	C ₁	C ₂	C ₃	H ₁	H ₂	H ₃	H ₄	h ₅	K ₃	K ₄
LFSB 32	9970	LFL 90-80	59	54	56	63.5	26	7	60	70	35	20.4	14	7	101.6	M6	M8
LFSB 52	18600	LFL 100-120	90	83	65	88.9	42	12	60	70	53.5	29.2	19.5	9.75	127	M6	M10
LFSB 52	18600	LFL 150-135	105	90	65	88.9	42	12	105	110	59	35.2	24	12	127	M6	M10

1. The beam rail is designed as a rigid, light weight beam, suitable for end mounting.
2. Contact factory for longer lengths.
3. Not valid for corrosion resistant series.



Beam Rail

LFSB SERIES

Enclosed, Sealed Carriage

LFKL SERIES

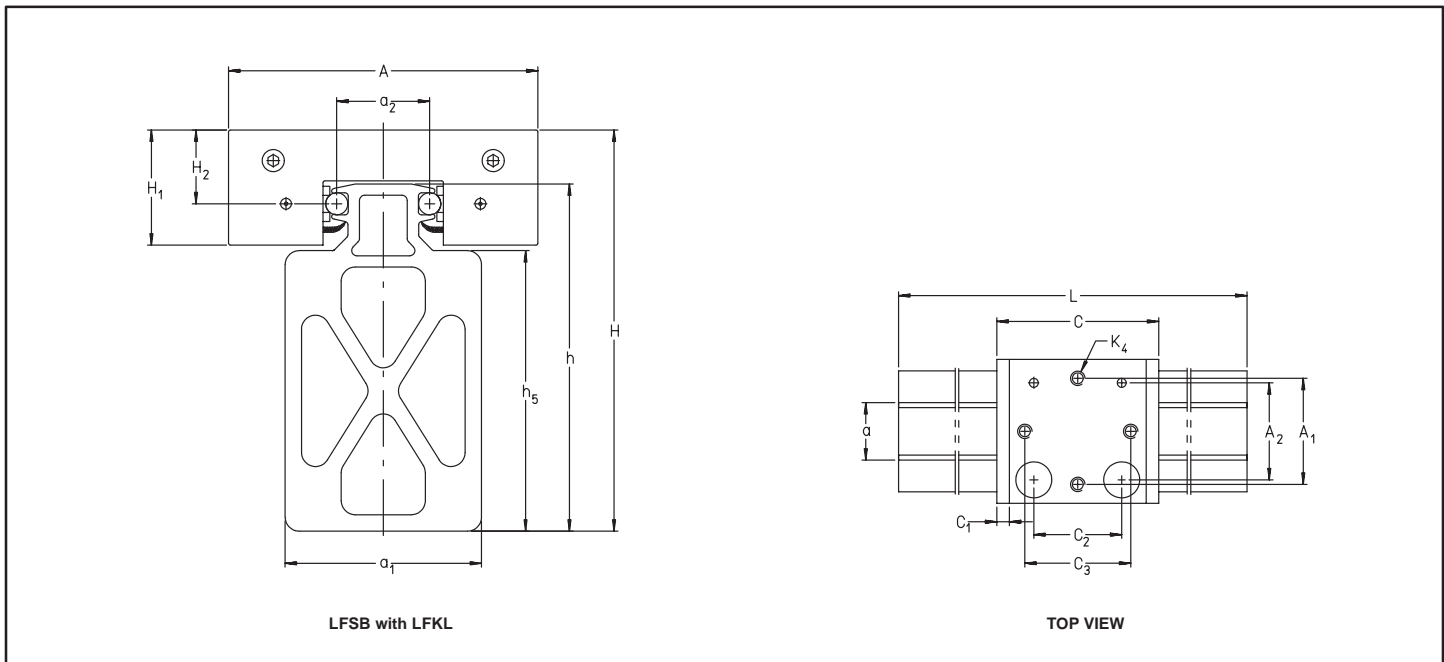
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

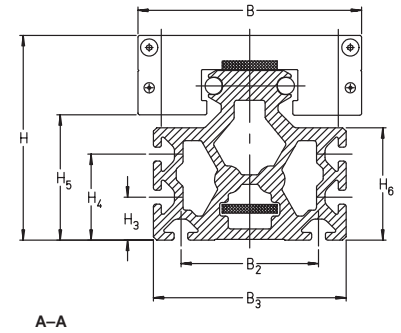
DIMENSION TABLE – Dimensions in mm																	
PART NUMBER RAIL	WEIGHT g/m	PART NUMBER CARRIAGE	WEIGHT g	DIMENSIONS						LOAD CALCULATIONS							
				CARRIAGE			RAIL			LOAD CURVE 4)	ALLOWABLE LOADS		ALLOWABLE MOMENTS			MOMENT OF INERTIA	
				H	A	C	h	a	L ²⁾		Fy N	Fz N	Mx Nm	My Nm	Mz Nm	ly mm ⁴	lz mm ⁴
LFSB 32	9970	LFKL 112-86	700	135.7	86	112	120.2	32	4000	2	850	1000	11	30	26	1.485 x 10 ⁶	4.72 x 10 ⁶
LFSB 52	18600	LFKL 136-130	1500	177.2	130	136	157.2	52	4000	3	1500	2500	33	75	47	5.25 x 10 ⁶	15.9 x 10 ⁶
LFSB 52	18600	LFKL 186-145	2900	183.5	145	186	157.2	52	4000	4	2400	4500	51	105	126	5.25 x 10 ⁶	15.9 x 10 ⁶
LFSB 52	18600	LFKL 205-155	3900	183.5	155	205	157.2	52	4000	5	4800	8000	101	480	288	5.25 x 10 ⁶	15.9 x 10 ⁶

MOUNTING DIMENSIONS – Dimensions in mm																
PART NUMBER RAIL	WEIGHT g/m	PART NUMBER CARRIAGE	A ₁	A ₂	a ₁	a ₂	C ₁	C ₂	C ₃	H ₁	H ₂	H ₃	h ₅	K ₄	K ₅	
LFSB 32	1000	LFKL 112-86	59	54	63.5	26	7	60	70	32	20.3	14	101.6	M8	18	
LFSB 52	3000	LFKL 136-130	90	83	88.9	42	10	60	70	46.1	29	19.5	127	M10	30	
LFSB 52	3000	LFKL 186-145	105	90	88.9	42	10	105	110	53.8	35.3	24	127	M10	30	
LFSB 52	3000	LFKL 205-155	115	95	112	42	10	120	140	55	35.3	24	127	M12	34	

1. Rail end support mounting holes can be provided to suit individual requirements.
2. Enclosed carriages are provided with felt shaft wipers with provision for lubrication, and a running bottom sealing element.
3. Contact factory for longer lengths.
4. Not valid for corrosion resistant series.



Linear Modular Unit With Track Roller Guidance System And Toothed Belt Drive MLF..ZR SERIES



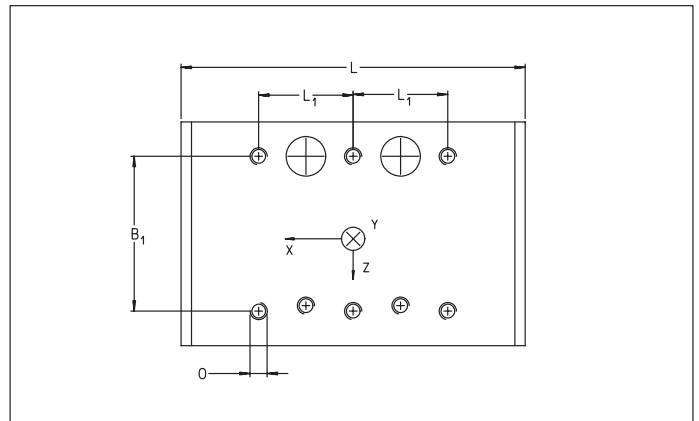
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.
For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm																				
PART NUMBER	DIMENSIONS																			
	L	B	H	L ₁ ±0.1	B ₁ ±0.1	O	H ₁	H ₂	B ₂	B ₃	H ₃	H ₄	H ₅	H ₆	L ₃	O ₁	D	D ₁ G7	D ₂	T ±0.1
MLF 32 086 ZR	155	86	82	50	59	M8	40	81.5	43	75	25	-	50	47	80	M6	80	70	61	2.3
MLF 52 130 ZR	200	130	119	55	90	M10	57.7	117.75	80	112	25	50	72.8	65.4	115.4	M8	115	95	76	3.5
MLF 52 145 ZR	245	145	125	80	105	M10	57.7	117.75	80	112	25	50	71.2	65.4	115.4	M8	115	95	76	3.5
MLF 52 155 ZR	260	155	125	90	115	M12	57.7	117.75	80	112	25	50	70	65.4	115.4	M8	115	95	76	3.5

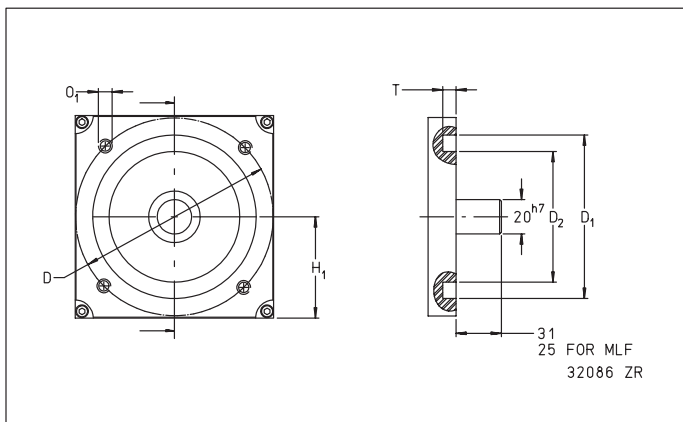
TOOTHED BELT / GEAR WHEELS					
	TOOTHED BELT TYPE	PERMISSIBLE TOOTHED BELT DRIVE FORCE N	MASS kg/m	DISPLACEMENT mm/rev.	MASS MOMENT OF INERTIA OF BOTH GEAR WHEELS kg·m ²
MLF 32 086 ZR	20 AT 5	640	0.068	175	2.2·10 ⁻⁴
MLF 52 130 ZR	32 AT 10	1750	0.2	270	12.6·10 ⁻⁴
MLF 52 145 ZR	32 AT 10	1750	0.2	270	12.6·10 ⁻⁴
MLF 52 155 ZR	32 AT 10	1750	0.2	270	12.6·10 ⁻⁴

- When using standard brush wipers:
L₂=Stroke+L+2xS
The additional factor S represents a security which is dependent on the specific application and must be at least 85 mm;
Stroke in mm
When using bellows: L₂=Stroke x 1.4+L+2xS
The factor of 1.4 accounts for the compressed length of the bellows.
Maximum length of profiled support rail L₂=6000 mm (longer profiled support rails available on request)
- Total weight G_{tot} = G₀ + $\frac{G_{100} \times (\text{Stroke} + 2xS)}{100}$ [kg]
When using bellows:
Total weight G_{tot} = G₀ + $\frac{G_{100} \times \text{Stroke} \times 1.4}{100}$ [kg]
- G₀ = weight of unit for stroke length 0
- G₁₀₀ = weight of unit per 100 mm stroke of the carriage
- G_{L,F,KL} = weight of moving mass of the carriage
- Values for individual loads and with complete support for underside of the unit. These must be reduced for combined loading.

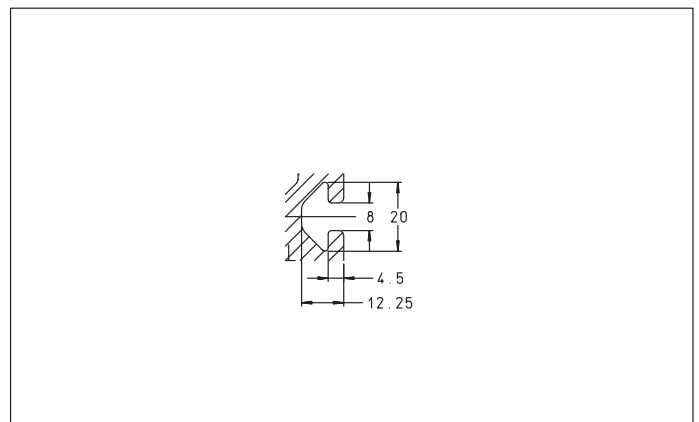
Mounting dimensions



Carriage



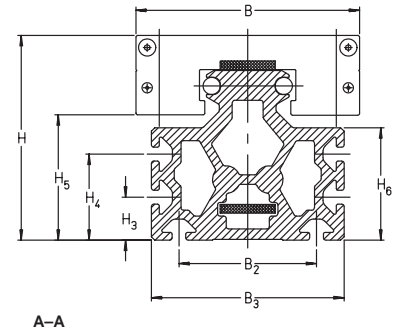
Coupling/Coupling Housing



T-grooves



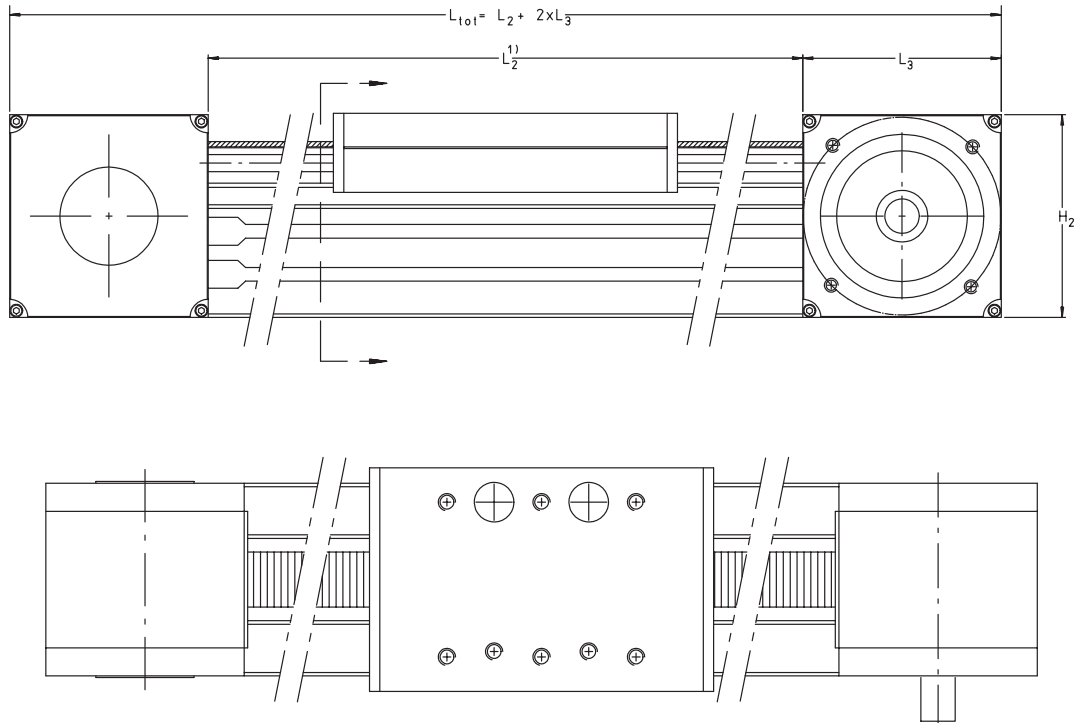
Linear Modular Unit With Track Roller Guidance System And Toothed Belt Drive MLF..ZR SERIES



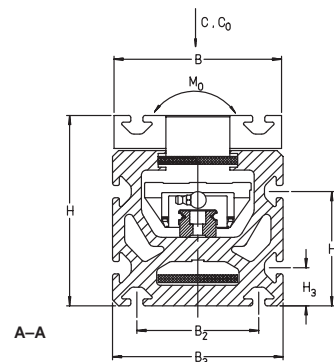
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.
For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

MASS ²⁾			PERMISSIBLE LOADS ⁶⁾				PERMISSIBLE MOMENTS ⁵⁾						GEOMETRICAL MOMENTS OF INERTIA cm ⁴	
G ₀ ³⁾ kg	G ₁₀₀ ⁴⁾ kg	G _{LFKL} ⁵⁾ kg	F _{yperm} N	F _{oyperm} N	F _{zperm} N	F _{ozperm} N	M _{xperm} Nm	M _{oxperm} Nm	M _{yperm} Nm	M _{oyperm} Nm	M _{zperm} Nm	M _{ozperm} Nm	ly	lz
4.8	0.6	0.8	850	1400	1000	1000	11	18	30	30	26	43	100	76
12	1.28	2	1500	2500	3500	3500	33	52	105	105	47	78	392	304
13.9	1.28	3.2	2400	4000	4500	4500	51	84	236	236	126	210	392	304
15.7	1.28	5	4800	7900	8000	8000	101	166	480	480	288	474	392	304

MLF 52130 ZR AR



Linear Modular Unit With Recirculating Ball Bearing Guidance System And Toothed Belt Drive MKUE..ZR..N SERIES



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm																
PART NUMBER	DIMENSIONS															
	L	B	H	B ₁ ±0.2	H ₁	H ₂	L ₁ ±0.1	H ₃	H ₄	B ₂	B ₃	O	D	D ₁ G7	D ₂	T ±0.1
MKUE 25 ZR..N	250	110	125	80	57.7	115.5	263	25	75	80	112	M8	115	95	76	3.5

TOOTHED BELT / GEAR WHEELS					
	TOOTHED BELT TYPE	PERMISSIBLE TOOTHED BELT DRIVE FORCE N	MASS kg/m	DISPLACEMENT mm/rev.	MASS MOMENT OF INERTIA OF BOTH GEAR WHEELS kg·m ²
MKUE 25 ZR..N	50 AT 10	1880	0.315	250	30.6·10 ⁻⁴

1) $L_2 = \text{Stroke} + L_1 + 2xS$
The additional factor S represents a security which is dependent on the specific application and must be at least 85 mm;
Stroke in mm
Maximum length of profiled support rail $L_2 = 4000$ mm (longer profiled support rails available on request)

2) Total weight $G_{tot} = G_0 + \frac{G_{100} \times (\text{Stroke} + 2xS)}{100}$ [kg]

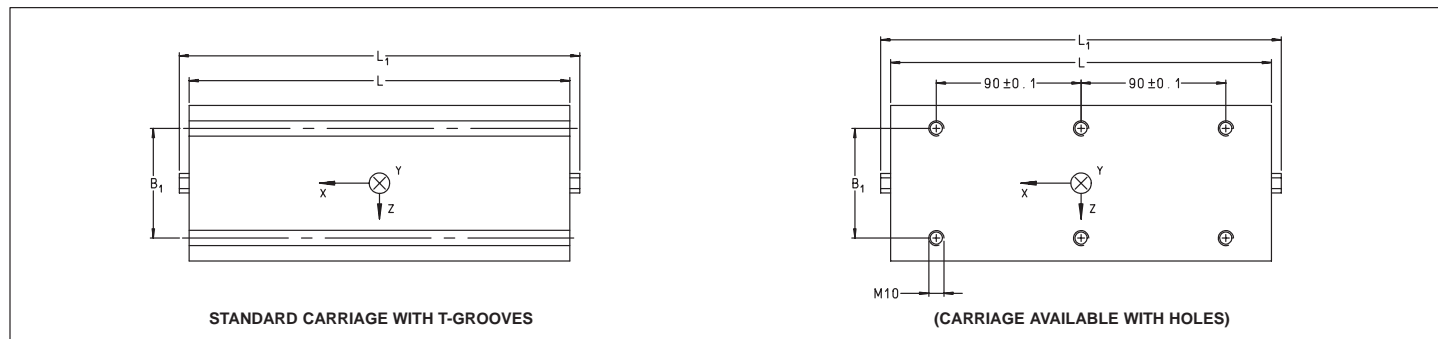
3) G_0 = weight of unit for stroke length 0

4) G_{100} = weight of unit per 100 mm stroke of the carriage

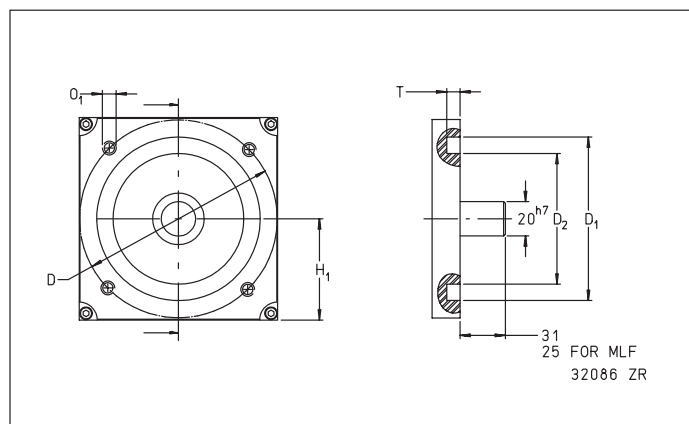
5) G_{MKWE} = weight of moving mass of the carriage

6) Values with complete support for underside of the unit

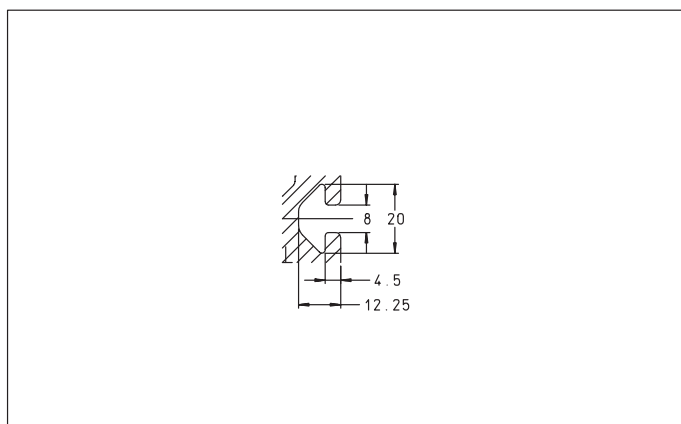
Mounting dimensions



Carriage



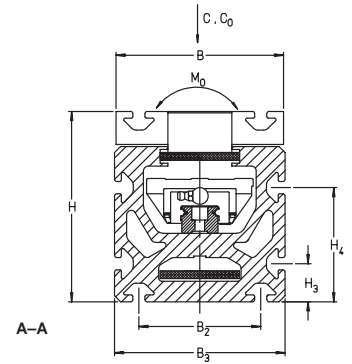
Coupling/Coupling Housing



T-grooves



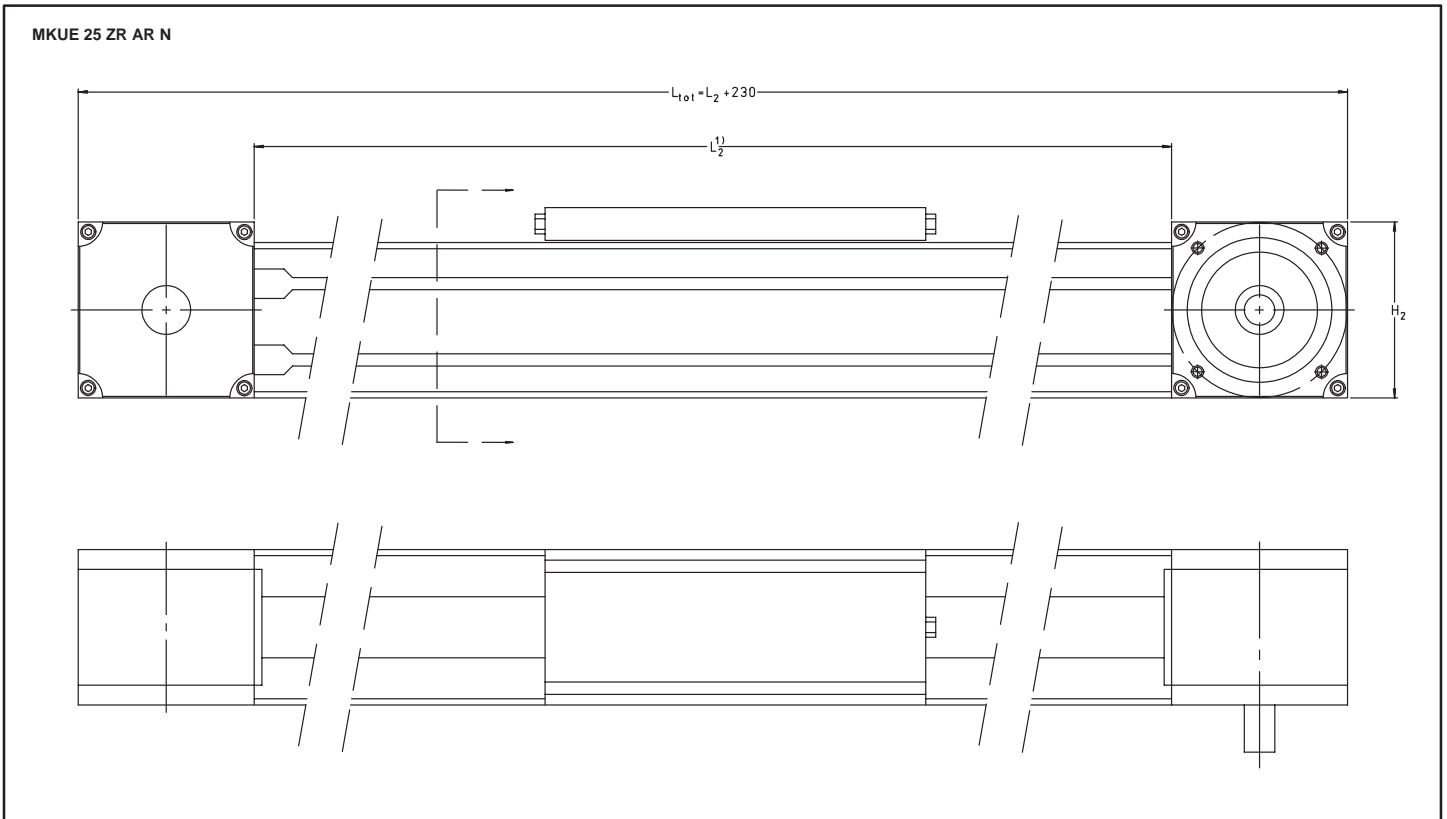
Linear Modular Unit With Recirculating Ball Bearing Guidance System And Toothed Belt Drive MKUE..ZR..N SERIES



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

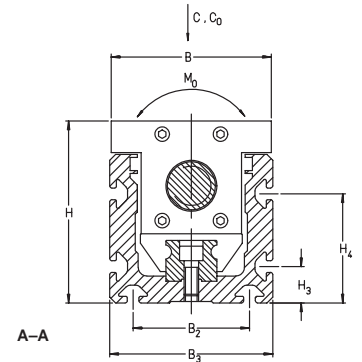
For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

MASS ²⁾			BASIC LOAD RATINGS ⁶⁾		PERMISSIBLE STATIC MOMENT ⁶⁾	GEOMETRICAL MOMENTS OF INERTIA cm ⁴	
G ₀ ³⁾ kg	G ₁₀₀ ⁴⁾ kg	G _{MKWE} ⁵⁾ kg	C kN	C ₀ kN	M ₀ STATIC Nm	ly	lz
16.2	1.66	3.8	26.3	41.8	411	733	517



Linear Modular Unit With Recirculating Ball Bearing Guidance System And Ball Screw Drive

MKUE..KGT SERIES



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

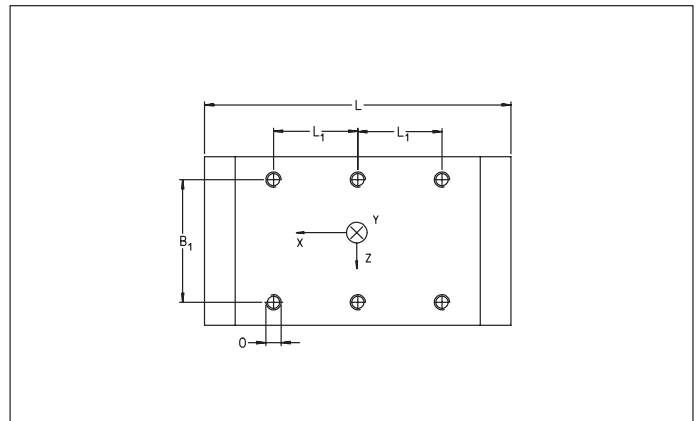
DIMENSION TABLE - Dimensions in mm															
PART NUMBER	SPINDLE $d_0 \times P^7)$	DIMENSIONS													
		L	B	H	L_1 ± 0.1	B_1 ± 0.1	O	d $\varnothing h6$	H_1	H_2	L_3	L_4	H_3	H_4	B_2
MKUE 25 KGT 5	32X5	200	110	125	55	80	M10	19	80	124.5	39	67	25	75	80
MKUE 25 KGT 10	32X10	200	110	125	55	80	M10	19	80	124.5	39	67	25	75	80
MKUE 25 KGT 40	32X40	200	110	125	55	80	M10	19	80	124.5	39	67	25	75	80

1) $L_2 = \text{Stroke} \times 1.2 + L + 2 \times S$
 S = spindle lead P; stroke in mm
 Maximum length of profiled Support rail $L_2 = 4000$ mm (longer profiled support rails available on request).
 Modular units with a stroke length over 1200 mm can be fitted with movable spindle supports.

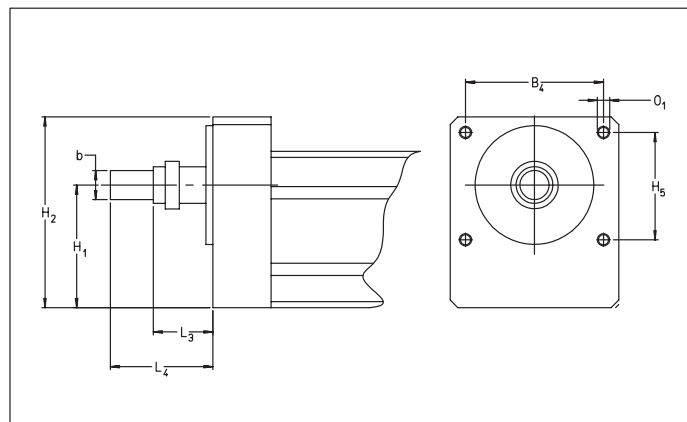
2) Total weight $G_{\text{tot}} = G_0 + \frac{G_{100} \times \text{Stroke} \times 1.2}{100}$ [kg]

- 3) G_0 = weight of unit for stroke length 0
- 4) G_{100} = weight of unit per 100 mm stroke of the carriage
- 5) G_{MKWE} = weight of moving mass of the carriage
- 6) Values with complete support for underside of the unit
- 7) $d_0 \times P$ = nominal spindle diameter \times spindle lead

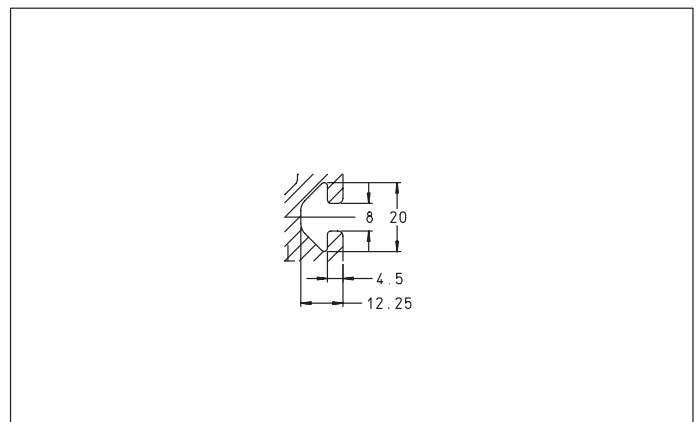
Mounting dimensions



Carriage



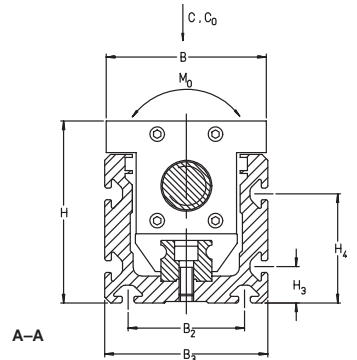
Coupling/Coupling Housing



T-grooves



Linear Modular Unit With Recirculating Ball Bearing Guidance System And Ball Screw Drive MKUE..KGT SERIES

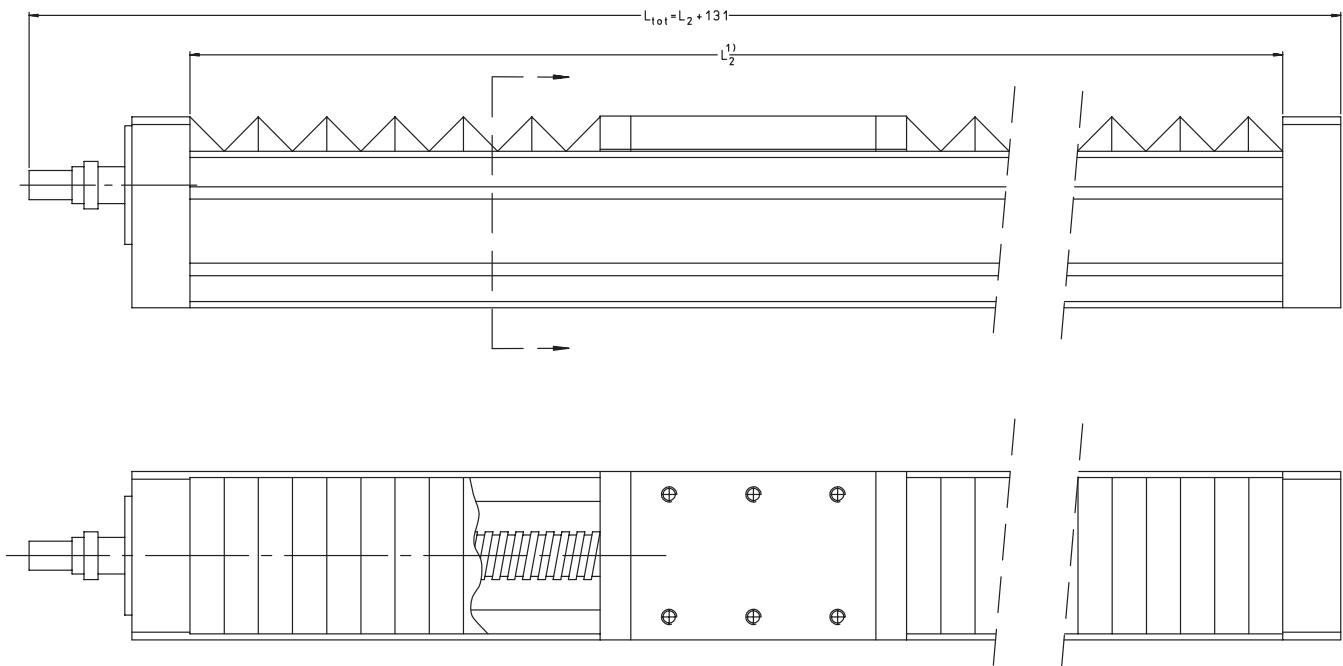


For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

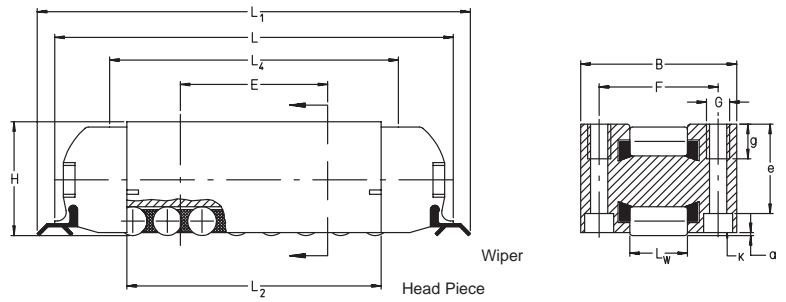
For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

				MASS ²⁾			BASIC LOAD RATINGS ⁶⁾		PERMISSIBLE STATIC MOMENT ⁶⁾	GEOMETRICAL MOMENTS OF INERTIA cm ⁴	
B ₃	H ₅	B ₄	O ₁	G ₀ ³⁾ kg	G ₁₀₀ ⁴⁾ kg	G _{MKWE} ⁵⁾ kg	C kN	C ₀ kN	M ₀ STATIC Nm	l _y	l _z
112	70	90	M8	17.4	2	4.3	26.3	41.8	411	717	408
112	70	90	M8	17.4	2	4.3	26.3	41.8	411	717	408
112	70	90	M8	17.4	2	4.3	26.3	41.8	411	717	408

MKUE 25 KGT 10



Linear Roller Bearings RUS, RUS..KS SERIES



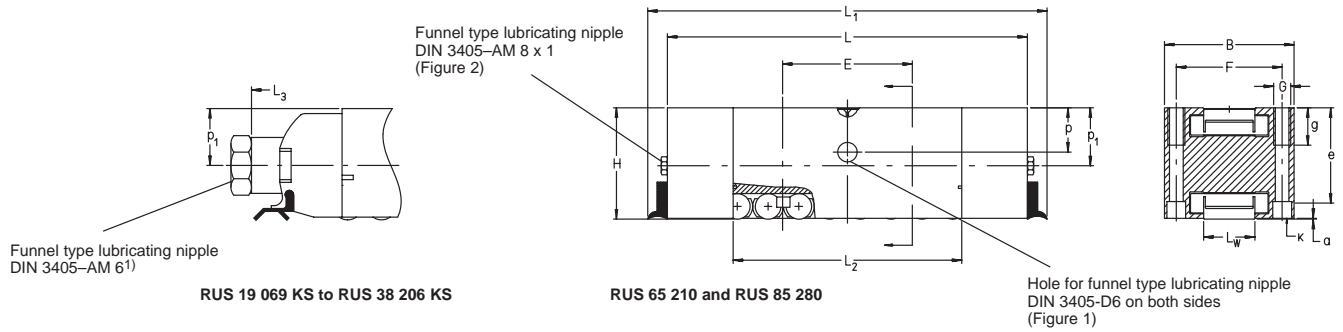
RUS 19 069 to RUS 38 206

For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm										
PART NUMBER		MASS kg	DIMENSIONS							
			H	L	B	L ₁	L ₂	L ₃	L _w	a
RUS 19 069		0.16	19	69	27	75	44	-	10	0.2
	RUS 19 069 KS	0.19	19	-	27	-	44	76	10	0.2
RUS 19 105		0.27	19	105	27	111	78.5	-	10	0.2
	RUS 19 105 KS	0.29	19	-	27	-	78.5	112	10	0.2
RUS 26 086		0.41	26	86	40	92	53	-	14	0.2
	RUS 26 086 KS	0.49	26	-	40	-	53	92	14	0.2
RUS 26 102		0.53	26	102	40	108	69	-	14	0.2
	RUS 26 102 KS	0.61	26	-	40	-	69	108	14	0.2
RUS 26 126		0.70	26	126	40	132	93	-	14	0.2
	RUS 26 126 KS	0.78	26	-	40	-	93	132	14	0.2
RUS 38 134		1.27	38	133	52	133	85	-	20	0.2
	RUS 38 134 KS	1.53	38	-	52	-	85	136	20	0.2
RUS 38 206		2.28	38	206	52	206	158	-	20	0.2
	RUS 38 206 KS	2.53	38	-	52	-	158	209	20	0.2
RUS 65 210		7.5	65	211	76	234	134	-	30	0.5
RUS 85 280*)		16	85	281	104	303	185	-	40	0.5

- 1) If the lubricating nipple is replaced by tube or pipe connections, the thread length must not exceed 6 mm.
 - 2) Minimum length to be supported
 - 3) UG guideway for RUS 85 280 available on request
- *) Available on request



BASIC LOAD RATINGS		MOUNTING DIMENSIONS								K FOR FIXING SCREWS TO DIN 912	MATCHING ADJUSTING GIBS	MATCHING GUIDEWAYS
dyn. C N	stat. C ₀ N	L ₄ ²⁾	E ±0.1	F ±0.1	G	e	g	p	p ₁			
42,000	33,000	50	25.5	20.6	M4	15.5	6	-	-	M3	VUS 19 069	UG 6628 UV 5323 UFA 3210 UFA 3210 UFB 4710
42,000	33,000	50	25.5	20.6	M4	15.5	6	-	10	M3	VUS 19 069	
68,000	61,000	85	50	20.6	M4	15.5	6	-	-	M3	VUS 19 105	
68,000	61,000	85	50	20.6	M4	15.5	6	-	10	M3	VUS 19 105	
76,000	56,000	63	28	30	M6	21	10	-	-	M4	VUS 26 086	UG 9741 UV 7532 UFA 4710 UFA 4710 UFB 6412
76,000	56,000	63	28	30	M6	21	10	-	13.5	M4	VUS 26 086	
95,000	75,000	79	44	30	M6	21	10	-	-	M4	VUS 26 102	
95,000	75,000	79	44	30	M6	21	10	-	13.5	M4	VUS 26 102	
122,000	103,000	103	68	30	M6	21	10	-	-	M4	VUS 26 126	
122,000	103,000	103	68	30	M6	21	10	-	13.5	M4	VUS 26 126	
179,000	133,000	100	51	41	M8	31	14	-	-	M6	VUS 38 134	UG 12 553 UV 9542 UFA 6412 UFA 6412 UFB 7812
179,000	133,000	100	51	41	M8	31	14	-	19.5	M6	VUS 38 134	
305,000	265,000	172	102	41	M8	31	14	-	-	M6	VUS 38 206	
305,000	265,000	172	102	41	M8	31	14	-	19.5	M6	VUS 38 206	
465,000	345,000	-	76	62	M10	55	22	26	34	M8	VUS 65 210	UG 16 260 UV 13 863 UFA 8815 UFA 8815 UFB 10 615
840,000	620,000	-	101.5	82.5	M14	73	30	33	45	M10	VUS 85 280	UG... ³⁾ UV 16 977 UFA 11 518 UFA 11 518 UFB 14 0185

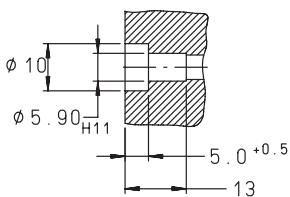


Figure 1

Lubrication holes are provided on both sides for funnel type grease nipples DIN 3405-D6 (supplied with the bearing) or either tube or pipe connection. If no lubrication connection is to be provided the holes should be plugged with the lubricating nipples.

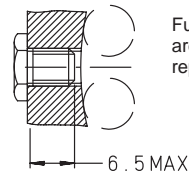
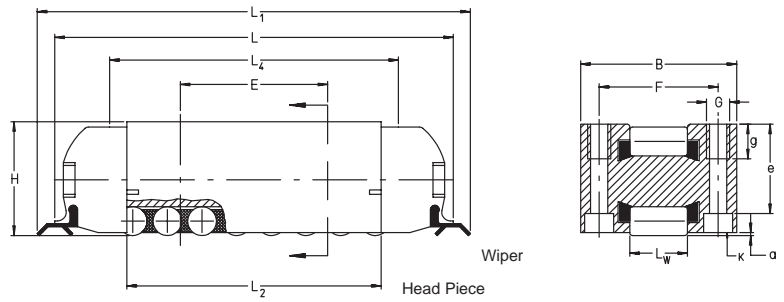


Figure 2

Funnel type lubricating nipples DIN 3405-AM 8x1 are mounted in the head pieces. They can be replaced by tube or pipe connections.

Linear Roller Bearings

RUSZ, RUSZ..KS SERIES



RUS 19 069 to RUS 38 206

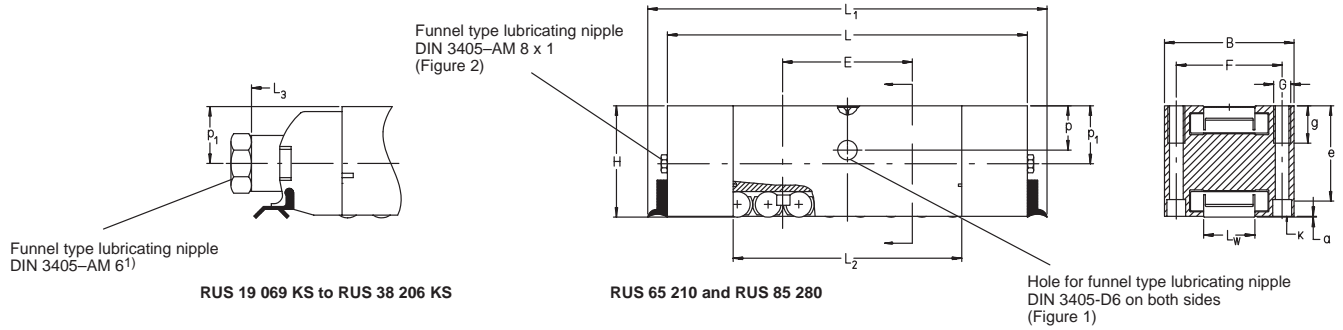
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm								
PART NUMBER	DIMENSIONS							
	H	L	B	L ₁	L ₂	L ₃	L _w	a
RUSZ 12044	19.05	69	25.4	75	44	—	10	0.2
RUSZ 18059	28.57	94	38.1	100	60	—	14	0.2
RUSZ 24084	38.1	133	50.8	133	85	—	20	0.2
RUSZ 12044 KS	19.05	69	25.4	75	44	76	10	0.2
RUSZ 18059 KS	28.57	94	38.1	100	60	132	14	0.2
RUSZ 24084 KS	38.1	133	50.8	133	85	136	20	0.2

- 1) If the lubricating nipple is replaced by tube or pipe connections, the thread length must not exceed 6 mm.
- 2) Minimum length to be supported





BASIC LOAD RATINGS		MOUNTING DIMENSIONS								K FOR FIXING SCREWS TO DIN 912	MATCHING ADJUSTING GIBS	MATCHING GUIDEWAYS
dyn. C N	stat. C ₀ N	L ₄ ²⁾	E ± 0.1	F ± 0.1	G	e	g	p	p ₁			
42000	33000	50	25.5	20.6	-	15.5	-	-	-	M3x22	VUSZ 12044	UG6628 UV5323 UFA/UFK3210 UFB4710
86000	65000	71	38	31	-	23.6	-	-	-	M4x30	VUSZ 18059	UG9745 UV7532 UFA/UFK4710 UFB6412
179000	133000	100	51	41	-	32.1	-	-	-	M5x45	VUSZ 24084	UG12553 UV9542 UFA/UFK6412 UFB7812
42000	33000	50	25.5	20.6	-	15.5	-	-	-	M3x22	VUSZ 12044	UG6628 UV5323 UFA/UFK3210 UFB4710
86000	65000	71	38	31	-	23.6	-	-	-	M4x30	VUSZ 18059	UG9745 UV7532 UFA/UFK4710 UFB6412
179000	133000	100	51	41	-	32.1	-	-	-	M5x45	VUSZ 24084	UG12553 UV9542 UFA/UFK6412 UFB7812

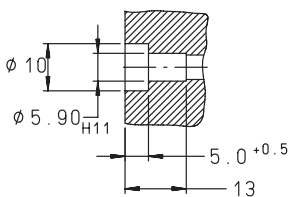


Figure 1

Lubrication holes are provided on both sides for funnel type grease nipples DIN 3405-D6 (supplied with the bearing) or either tube or pipe connection. If no lubrication connection is to be provided the holes should be plugged with the lubricating nipples.

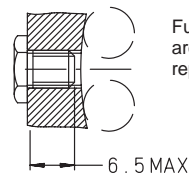
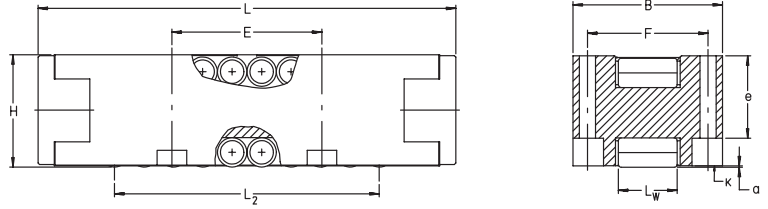


Figure 2

Funnel type lubricating nipples DIN 3405-AM 8x1 are mounted in the head pieces. They can be replaced by tube or pipe connections.

Linear Roller Bearings

PR SERIES



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm							
PART NUMBER	MASS kg	DIMENSIONS					
		H	L	B	L ₂	L _w	a
PR 14 032	0.095	14.285	51	22.23	31	9	0.2
PR 14 044	0.2	19.05	69	25.4	42	10	0.35
PR 14 061	0.65	28.57	96	38.1	58.5	16	0.35
PR 14 089	1.75	38.1	142	50.8	90	20	0.4
PR 14 135	5.65	57.15	196	76.2	126	30	0.5
PR 14 182	13.25	76.2	264	101.6	167	40	0.6

- 1) UG guideway for PR 14 182 available on request
- 2) Not available from stock. Please check delivery time.

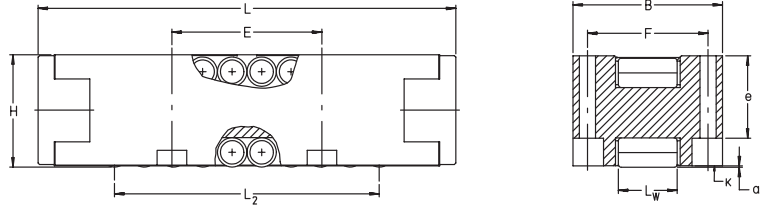
Ordering examples:

Linear roller bearing PR 14 061
with a tolerance for the nominal height H of -10 to -15 μm:
PR 14 061 -10 -15

Linear roller bearing PR 14 135
with a tolerance for the nominal height H of -10 to -20 μm:
PR 14 135 -10 -20

Linear Roller Bearings

PR SERIES



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

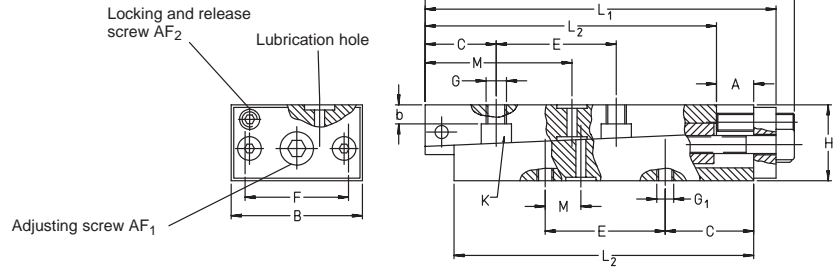
For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

BASIC LOAD RATINGS		MOUNTING DIMENSIONS			K FOR FIXING SCREWS TO DIN 912	MATCHING ADJUSTING GIBS	MATCHING GUIDEWAYS	
dyn. C N	stat. C ₀ N	E ±0.1	F ±0.1	e				
21,700	17,600	19	17.1	10	M2.5	–	UG 6628 UV 5323	UFA 3210 UFK 3210
44,000	37,500	25.5	20.6	14	M3	VUSZ 12 044	UG 6628 UV 5323	UFA 3210 UFK 3210 UFB 4710
107,000	86,000	38	31	20.8	M4	VUSZ 18 059	UG 9741 UV 7532	UFA 4710 UFK 4710 UFB 6412
205,000	171,000	51	41	28	M5	VUSZ 24 084	UG 12 553 UV 9542	UFA 6412 UFK 6412 UFB 7812
435,000	345,000	76.2	62	42	M6	VUSZ 36 135 ²⁾	UG 16 260 UV 13 863	UFA 8815 UFK 8815 UFB 10 615
790,000	620,000	101.6	82.5	56	M8	VUSZ 48 182 ²⁾	UG... ¹⁾ UV 16 977	UFA 11 518 UFK 11 518 UFB 14 018

Adjusting Gibs

VUS, METRIC SIZES SERIES

VUSZ, INCH SIZES SERIES



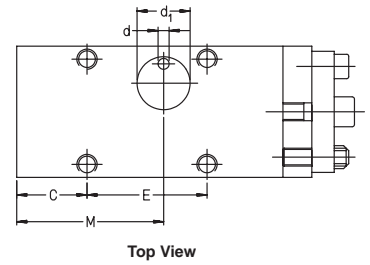
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm										
PART NUMBER	MASS kg	DIMENSIONS			MOUNTING DIMENSIONS					
		B	H min.	L max.	L ₁ max.	L ₂	E ±0.1	F ±0.1	b	C
VUS 19 069	0.24	26.5	16	78	73	62	25.5	20.6	4	16.5
VUS 19 105	0.32	26.5	16	123	119	100	50	20.6	3.5	25
VUS 26 086	0.6	39.5	25	97	89	75	28	30	6	20.5
VUS 26 102	0.71	39.5	25	113	105	91	44	30	6	20.5
VUS 26 126	0.9	39.5	25	137	129	115	68	30	6	20.5
VUS 38 134	1.47	51.5	30	141	131	115	51	41	7	28
VUS 38 206	2.1	51.5	25	250	240	200	102	41	5	49

DIMENSION TABLE - Dimensions in mm										
PART NUMBER	MASS kg	DIMENSIONS			MOUNTING DIMENSIONS					
		B	H min.	L max.	L ₁ max.	L ₂	E ±0.1	F ±0.1	b	C
VUSZ 12 044	0.19	25	16	78	73	62	25.5	19 ¹⁾	4	16.5
VUSZ 18 059	0.63	37.6	25	107	99	85	38	31	6	20.5
VUSZ 24 084	1.38	50	30	141	131	115	51	41	7	28

1) Distance between the mounting holes in the top wedge of the gib; deviates from the bottom wedge

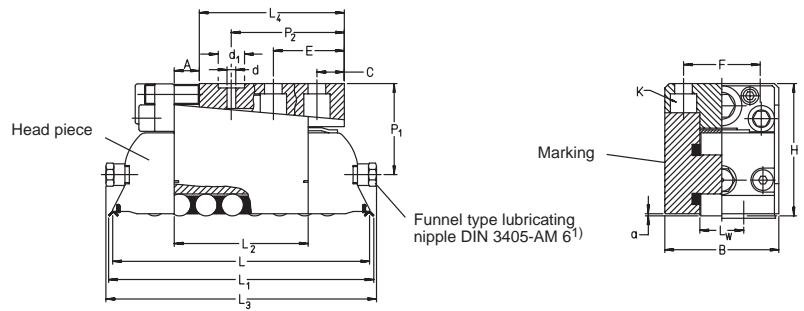


Top View

DIMENSION TABLE - Dimensions in mm											
M	d	d ₁	A max.	G	G ₁ , K FOR FIXING SCREW TO DIN 912	HEIGHT CHANGE		ADJUSTING SCREW AF ₁	LOCKING AND RELEASE SCREW AF ₂	MATCHING LINEAR ROLLER BEARINGS	
						ΔH	PER SCREW ROTATION				
						max.					
16.5	3.5	12	7	M 4	M 3	0.35	0.035	3	2	RUS 19 069	
29	3.5	12	15	M 4	M 3	0.5	0.023	3	2.5	RUS 19 105	
19.5	5	16	8	M 6	M 4	0.4	0.05	6	3	RUS 26 086	
27.5	5	16	8	M 6	M 4	0.4	0.05	6	3	RUS 26 102	
39.5	5	16	8	M 6	M 4	0.4	0.05	6	3	RUS 26 126	
30.5	5	22	8	M 8	M 6	0.4	0.062	8	4	RUS 38 134	
61	5	22	30	—	M 6	1	0.05	8	5	RUS 38 206	

DIMENSION TABLE - Dimensions in mm											
M	d	d ₁	A max.	G	G ₁ , K FOR FIXING SCREW TO DIN 912	HEIGHT CHANGE		ADJUSTING SCREW AF ₁	LOCKING AND RELEASE SCREW AF ₂	MATCHING LINEAR ROLLER BEARINGS	
						ΔH	PER SCREW ROTATION				
						max.					
16.5	3.5	12	7	—	M 3	0.35	0.035	3	2	PR 14 044	
20	5	16	8	—	M 4	0.4	0.05	6	3	PR 14 061	
30.5	5	22	8	—	M 5	0.4	0.062	8	4	PR 14 089	

Linear Roller Bearings With Integral Adjusting Gib RUSV..KS SERIES

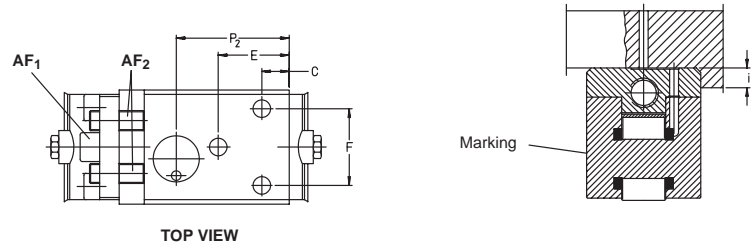


For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm													
PART NUMBER	MASS kg	DIMENSIONS										BASIC LOAD RATINGS	
		H	L	B	L _w	a	L ₁ ≈	L ₂	L ₃	L ₄	d ₁	dyn. C N	stat. C ₀ N
RUSV 30 069 KS	0.32	30	69	27	10	0.3	75	43.5	82	45	12	42,000	33,000
RUSV 30 105 KS	0.46	30	105	27	10	0.3	111	78.5	117	79	12	68,000	61,000
RUSV 42 086 KS	0.81	42	86	40	14	0.3	92	52.4	98	54	16	76,000	56,000
RUSV 42 102 KS	0.99	42	102	40	14	0.3	108	68.4	114	70	16	95,000	75,000
RUSV 42 126 KS	1.26	42	126	40	14	0.3	132	92.4	138	94	16	122,000	103,000
RUSV 60 134 KS	2.25	60	134	52	20	0.3	133	85	143	86	22	179,000	133,000
RUSV 60 206 KS	3.47	60	206	52	20	0.3	206	158	216	159	22	305,000	265,000

1) If the lubricating nipple is replaced by tube or pipe connections, the thread length must not exceed 6mm.



TOP VIEW

DIMENSION TABLE - Dimensions in mm															
MOUNTING DIMENSIONS									ADJUSTING SCREW AF ₁	LOCKING AND RELEASE SCREW AF ₂	HEIGHT CHANGE			MATCHING LINEAR ROLLER BEARINGS	MATCHING GUIDEWAY
C	E	F	i	P ₁	P ₂	P ₃	d	K			A max.	ΔH max.	PER SCREW ROTATION		
V 5	25	19	4	21	33	9	2.5	M 4	3	2	7	0.37	0.035	RUS 19 069 KS	UG 6628
	45	19	4	21	53	9	2.5	M 4	3	2	7	0.37	0.023	RUS 19 105 KS	UV 5323 UFA 3210 UFK 3210 UFB 4710
8	23	26	6	29.5	38	14.5	3	M 6	6	3	10	0.52	0.05	RUS 26 086 KS	UG 9741
	38	26	6	29.5	53	14.5	3	M 6	6	3	10	0.52	0.05	RUS 26 102 KS	UV 7532
	58	26	6	29.5	73	14.5	3	M 6	6	3	10	0.52	0.05	RUS 26 126 KS	UFA 4710 UFK 4710 UFB 6412
10	45	35	8	41.5	65	18	4	M 8	8	4	15	0.78	0.062	RUS 38 134 KS	UG 12 553
	115	35	8	41.5	145	18	4	M 8	8	4	15	0.78	0.05	RUS 38 206 KS	UV 9542 UFA 6412 UFK 6412 UFB 7812

Planetary Roller Screw

RGT SERIES

- Split roller nut, preloaded
- Standard ends configuration

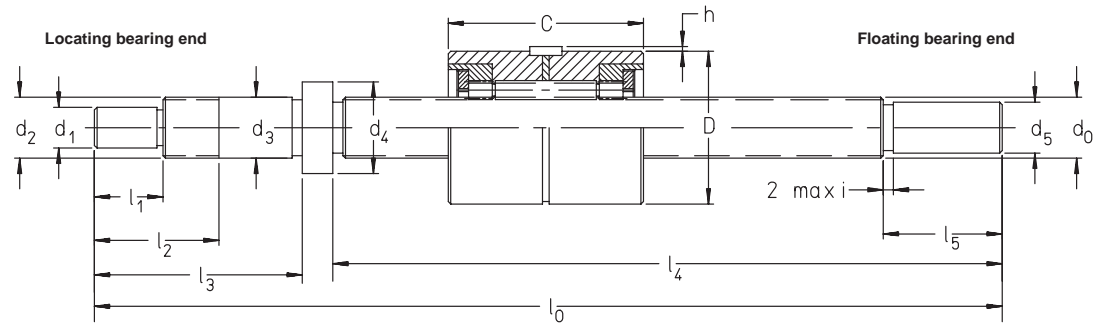
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm															
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	STROKE H	MASS kg	DIMENSIONS - SCREW SHAFT										
					d_1 ISO h6	d_2	d_3 -0.005	d_4	d_5 ISO h6	l_0	l_1	l_2	l_3	l_4	l_5
5	RGT 5.	1.	25	0.084	5	M6X0.5	6	10	4	113	11	22	34	75	14
	RGT 5.	1.	50	0.088	5	M6X0.5	6	10	4	138	11	22	34	100	14
	RGT 5.	1.	75	0.092	5	M6X0.5	6	10	4	163	11	22	34	125	14
	RGT 5.	1.	100	0.096	5	M6X0.5	6	10	4	188	11	22	34	150	14
8	RGT 8.	1.	25	0.11	5	M6X0.5	6	10	6	120	11	22	34	82	16
	RGT 8.	1.	50	0.121	5	M6X0.5	6	10	6	145	11	22	34	107	16
	RGT 8.	1.	100	0.141	5	M6X0.5	6	10	6	195	11	22	34	157	16
	RGT 8.	1.	150	0.16	5	M6X0.5	6	10	6	245	11	22	34	207	16
	RGT 8.	1.	200	0.18	5	M6X0.5	6	10	6	295	11	22	34	257	16
	RGT 8.	2.	25	0.11	5	M6X0.5	6	10	6	120	11	22	34	82	16
	RGT 8.	2.	50	0.121	5	M6X0.5	6	10	6	145	11	22	34	107	16
	RGT 8.	2.	100	0.141	5	M6X0.5	6	10	6	195	11	22	34	157	16
	RGT 8.	2.	150	0.16	5	M6X0.5	6	10	6	245	11	22	34	207	16
	RGT 8.	2.	200	0.18	5	M6X0.5	6	10	6	295	11	22	34	257	16
	RGT 8.	4.	25	0.11	5	M6X0.5	6	10	6	120	11	22	34	82	16
	RGT 8.	4.	50	0.121	5	M6X0.5	6	10	6	145	11	22	34	107	16
	RGT 8.	4.	100	0.141	5	M6X0.5	6	10	6	195	11	22	34	157	16
	RGT 8.	4.	150	0.16	5	M6X0.5	6	10	6	245	11	22	34	207	16
	RGT 8.	4.	200	0.18	5	M6X0.5	6	10	6	295	11	22	34	257	16
	RGT 8.	5.	25	0.11	5	M6X0.5	6	10	6	120	11	22	34	82	16
	RGT 8.	5.	50	0.121	5	M6X0.5	6	10	6	145	11	22	34	107	16
	RGT 8.	5.	100	0.141	5	M6X0.5	6	10	6	195	11	22	34	157	16
	RGT 8.	5.	150	0.16	5	M6X0.5	6	10	6	245	11	22	34	207	16
	RGT 8.	5.	200	0.18	5	M6X0.5	6	10	6	295	11	22	34	257	16

1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.





NUT			KEY TO DIN 6885	LOAD RATINGS		SPRINGS RATIO C_K $N^{2/3} / \mu m$	LIMITING SPEED ¹⁾ n_g grease rpm	LOCATING BEARING	FLOATING BEARING	SEAL	LOCK NUT
D ISO g6	h	C h12		dyn. C N	stat. C ₀ N						
19	1.3	31	3X3X10	5,300	5,400	27	6,000	ZKLN0624.2RS	HK0408TN	G4X8X2	ZM06
19	1.3	31	3X3X10	5,300	5,400	27	6,000	ZKLN0624.2RS	HK0408TN	G4X8X2	ZM06
19	1.3	31	3X3X10	5,300	5,400	27	6,000	ZKLN0624.2RS	HK0408TN	G4X8X2	ZM06
19	1.3	31	3X3X10	5,300	5,400	27	6,000	ZKLN0624.2RS	HK0408TN	G4X8X2	ZM06
21	1.3	31	3X3X10	3,100	3,950	31	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	3,100	3,950	31	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	3,100	3,950	31	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	3,100	3,950	31	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	3,100	3,950	31	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	6,200	4,550	21	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	6,200	4,550	21	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	6,200	4,550	21	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	6,200	4,550	21	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	6,200	4,550	21	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	12,200	4,800	15	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	12,200	4,800	15	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	12,200	4,800	15	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	12,200	4,800	15	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	12,200	4,800	15	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	15,200	4,800	13	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	15,200	4,800	13	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	15,200	4,800	13	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	15,200	4,800	13	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06
21	1.3	31	3X3X10	15,200	4,800	13	5,800	ZKLN0624.2RS	NK6/10TN	G6X12X2	ZM06

Planetary Roller Screw

RGT SERIES

- Split roller nut, preloaded
- Standard ends configuration

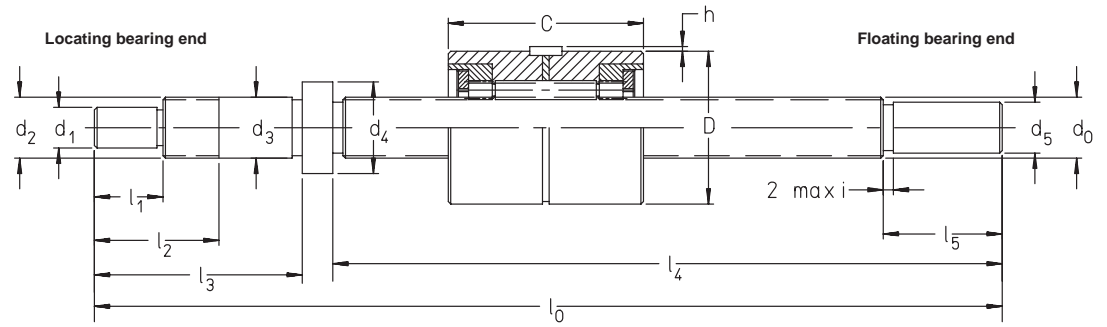
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE (Contd.) - Dimensions in mm															
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	STROKE H	MASS kg	DIMENSIONS – SCREW SHAFT										
					d_1 ISO h6	d_2	d_3 -0.005	d_4	d_5 ISO h6	l_0	l_1	l_2	l_3	l_4	l_5
12	RGT 12.	1.	100	0.293	10	M12X1	12	18	10	220	20	33	53	161	20
	RGT 12.	1.	200	0.382	10	M12X1	12	18	10	320	20	33	53	261	20
	RGT 12.	1.	300	0.47	10	M12X1	12	18	10	420	20	33	53	361	20
	RGT 12.	1.	400	0.559	10	M12X1	12	18	10	520	20	33	53	461	20
	RGT 12.	1.	500	0.648	10	M12X1	12	18	10	620	20	33	53	561	20
	RGT 12.	2.	100	0.293	10	M12X1	12	18	10	220	20	33	53	161	20
	RGT 12.	2.	200	0.382	10	M12X1	12	18	10	320	20	33	53	261	20
	RGT 12.	2.	300	0.47	10	M12X1	12	18	10	420	20	33	53	361	20
	RGT 12.	2.	400	0.559	10	M12X1	12	18	10	520	20	33	53	461	20
	RGT 12.	2.	500	0.648	10	M12X1	12	18	10	620	20	33	53	561	20
	RGT 12.	4.	100	0.293	10	M12X1	12	18	10	220	20	33	53	161	20
	RGT 12.	4.	200	0.382	10	M12X1	12	18	10	320	20	33	53	261	20
	RGT 12.	4.	300	0.47	10	M12X1	12	18	10	420	20	33	53	361	20
	RGT 12.	4.	400	0.559	10	M12X1	12	18	10	520	20	33	53	461	20
	RGT 12.	4.	500	0.648	10	M12X1	12	18	10	620	20	33	53	561	20
	RGT 12.	5.	100	0.293	10	M12X1	12	18	10	220	20	33	53	161	20
	RGT 12.	5.	200	0.382	10	M12X1	12	18	10	320	20	33	53	261	20
	RGT 12.	5.	300	0.47	10	M12X1	12	18	10	420	20	33	53	361	20
	RGT 12.	5.	400	0.559	10	M12X1	12	18	10	520	20	33	53	461	20
	RGT 12.	5.	500	0.648	10	M12X1	12	18	10	620	20	33	53	561	20

1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.





NUT			KEY TO DIN 6885	LOAD RATINGS		SPRING RATIO	LIMITING SPEED ¹⁾	LOCATING BEARING		FLOATING BEARING	SEAL	LOCK NUT
D ISO g6	h	C h12		dyn. C N	stat. C ₀ N	C _K N ^{2/3} / μm	n _g grease rpm					
32	1.7	31	4X4X14	3,700	6,400	38	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
32	1.7	31	4X4X14	3,700	6,400	38	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
32	1.7	31	4X4X14	3,700	6,400	38	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
32	1.7	31	4X4X14	3,700	6,400	38	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
32	1.7	31	4X4X14	3,700	6,400	38	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	4,900	5,000	27	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	4,900	5,000	27	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	4,900	5,000	27	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	4,900	5,000	27	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	4,900	5,000	27	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	9,700	5,500	19	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	9,700	5,500	19	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	9,700	5,500	19	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	9,700	5,500	19	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	9,700	5,500	19	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	12,100	5,500	17	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	12,100	5,500	17	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	12,100	5,500	17	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	12,100	5,500	17	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12
26	2	31	4X4X14	12,100	5,500	17	5,600	ZKLN1242.2RS	ZKLF1255.2RS	NK10/12TN	G10X17X3	ZM12

Planetary Roller Screw

RGT SERIES

- Split roller nut, preloaded
- Standard ends configuration

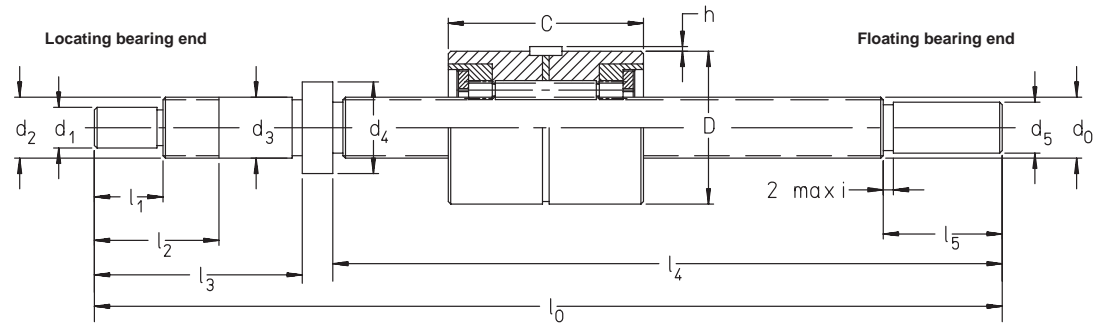
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE (Contd.) - Dimensions in mm															
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	STROKE H	MASS kg	DIMENSIONS - SCREW SHAFT										
					d_1 ISO h6	d_2	d_3 -0.005	d_4	d_5 ISO h6	l_0	l_1	l_2	l_3	l_4	l_5
15	RGT 15.	2.	100	0.501	12	M15X1	15	22	12	224	20	31	53	165	20
	RGT 15.	2.	200	0.64	12	M15X1	15	22	12	324	20	31	53	265	20
	RGT 15.	2.	300	0.779	12	M15X1	15	22	12	424	20	31	53	365	20
	RGT 15.	2.	400	0.917	12	M15X1	15	22	12	524	20	31	53	465	20
	RGT 15.	2.	500	1.056	12	M15X1	15	22	12	624	20	31	53	565	20
	RGT 15.	2.	600	1.195	12	M15X1	15	22	12	724	20	31	53	665	20
	RGT 15.	4.	100	0.501	12	M15X1	15	22	12	224	20	31	53	165	20
	RGT 15.	4.	200	0.64	12	M15X1	15	22	12	324	20	31	53	265	20
	RGT 15.	4.	300	0.779	12	M15X1	15	22	12	424	20	31	53	365	20
	RGT 15.	4.	400	0.917	12	M15X1	15	22	12	524	20	31	53	465	20
	RGT 15.	4.	500	1.056	12	M15X1	15	22	12	624	20	31	53	565	20
	RGT 15.	4.	600	1.195	12	M15X1	15	22	12	724	20	31	53	665	20
	RGT 15.	5.	100	0.501	12	M15X1	15	22	12	224	20	31	53	165	20
	RGT 15.	5.	200	0.64	12	M15X1	15	22	12	324	20	31	53	265	20
	RGT 15.	5.	300	0.779	12	M15X1	15	22	12	424	20	31	53	365	20
	RGT 15.	5.	400	0.917	12	M15X1	15	22	12	524	20	31	53	465	20
	RGT 15.	5.	500	1.056	12	M15X1	15	22	12	624	20	31	53	565	20
	RGT 15.	5.	600	1.195	12	M15X1	15	22	12	724	20	31	53	665	20

1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.





NUT			KEY TO DIN 6885	BASIC LOAD RATINGS		SPRING RATIO	LIMITING SPEED ¹⁾	LOCATING BEARING		FLOATING BEARING	SEAL	LOCK NUT
D ISO g6	h	C h12		dyn. C N	stat. C ₀ N	C _K N ^{2/3} / μm	n _g grease rpm					
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	6,100	8,000	34	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	12,200	8,900	24	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
34	1.7	35	4X4X14	15,200	9,100	21	5,500	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15

Planetary Roller Screw

RGT SERIES

- Split roller nut, preloaded
- Standard ends configuration

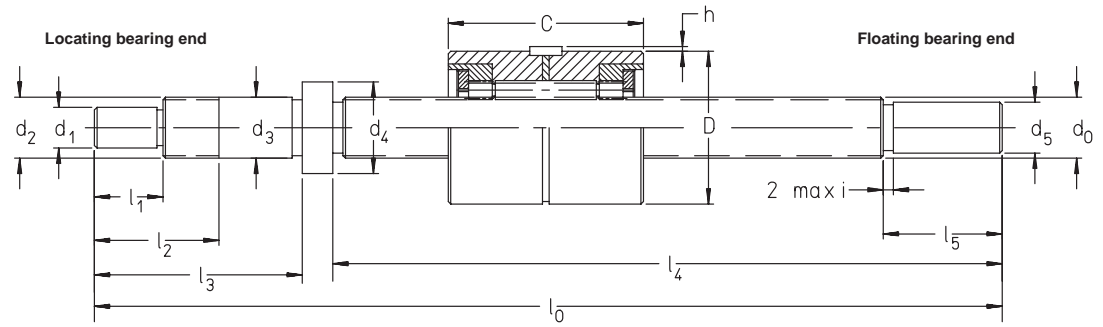
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE (Contd.) - Dimensions in mm															
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	STROKE H	MASS kg	DIMENSIONS – SCREW SHAFT										
					d_1 ISO h6	d_2	d_3 -0.005	d_4	d_5 ISO h6	l_0	l_1	l_2	l_3	l_4	l_5
20	RGT 20.	2.	400	1.713	12	M15X1	15	22	12	546	20	31	53	487	20
	RGT 20.	2.	500	1.96	12	M15X1	15	22	12	646	20	31	53	587	20
	RGT 20.	2.	600	2.207	12	M15X1	15	22	12	746	20	31	53	687	20
	RGT 20.	2.	800	2.7	12	M15X1	15	22	12	946	20	31	53	887	20
	RGT 20.	2.	1000	3.193	12	M15X1	15	22	12	1146	20	31	53	1087	20
	RGT 20.	2.	1200	3.686	12	M15X1	15	22	12	1346	20	31	53	1287	20
	RGT 20.	4.	400	1.713	12	M15X1	15	22	12	546	20	31	53	487	20
	RGT 20.	4.	500	1.96	12	M15X1	15	22	12	646	20	31	53	587	20
	RGT 20.	4.	600	2.207	12	M15X1	15	22	12	746	20	31	53	687	20
	RGT 20.	4.	800	2.7	12	M15X1	15	22	12	946	20	31	53	887	20
	RGT 20.	4.	1000	3.193	12	M15X1	15	22	12	1146	20	31	53	1087	20
	RGT 20.	4.	1200	3.686	12	M15X1	15	22	12	1346	20	31	53	1287	20
	RGT 20.	5.	400	1.713	12	M15X1	15	22	12	546	20	31	53	487	20
	RGT 20.	5.	500	1.96	12	M15X1	15	22	12	646	20	31	53	587	20
	RGT 20.	5.	600	2.207	12	M15X1	15	22	12	746	20	31	53	687	20
	RGT 20.	5.	800	2.7	12	M15X1	15	22	12	946	20	31	53	887	20
	RGT 20.	5.	1000	3.193	12	M15X1	15	22	12	1146	20	31	53	1087	20
	RGT 20.	5.	1200	3.686	12	M15X1	15	22	12	1346	20	31	53	1287	20
	RGT 20.	6.	400	1.713	12	M15X1	15	22	12	546	20	31	53	487	20
	RGT 20.	6.	500	1.96	12	M15X1	15	22	12	646	20	31	53	587	20
	RGT 20.	6.	600	2.207	12	M15X1	15	22	12	746	20	31	53	687	20
	RGT 20.	6.	800	2.7	12	M15X1	15	22	12	946	20	31	53	887	20
	RGT 20.	6.	1000	3.193	12	M15X1	15	22	12	1146	20	31	53	1087	20
	RGT 20.	6.	1200	3.686	12	M15X1	15	22	12	1346	20	31	53	1287	20

1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.



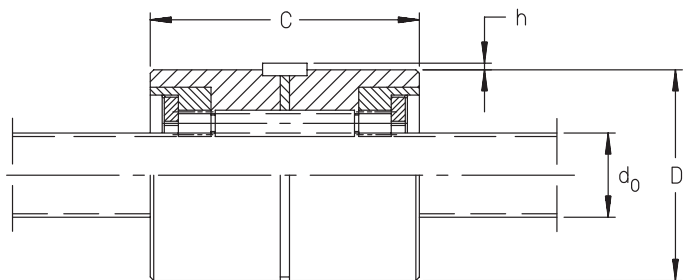


NUT			KEY TO DIN 6885	LOAD RATINGS		SPRING RATIO	LIMITING SPEED ¹⁾	LOCATING BEARING		FLOATING BEARING	SEAL	LOCK NUT
D ISO g6	h	C h12		dyn. C N	stat. C ₀ N	C _K N ^{2/3} / μm	n _g grease rpm					
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	10,900	21,800	61	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	21,700	25,000	42	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	27,000	26,000	38	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15
42	1.7	55	4X4X18	32,500	26,500	34	5,200	ZKLN1545.2RS	ZKLF1560.2RS	NK12/12TN	G12X19X3	ZM15

Planetary Roller Screw

RGT SERIES

- Split roller nut, preloaded
- Special ends configuration*)



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm											
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	NUT DIMENSIONS			KEY TO DIN 6885	SPRING RATIO C_K $N^{2/3} / \mu m$	LIMITING SPEED ¹⁾ n_g grease rpm	LOAD RATINGS		
			D ISO g6	h	C h12				dyn. C N	stat. C_0 N	
24	RGT	24.	2	48	1.7	55	4X4X18	75	5,000	13,200	32,000
	RGT	24.	4	48	1.7	55	4X4X18	52	5,000	26,000	37,500
	RGT	24.	5	48	1.7	55	4X4X18	46	5,000	32,500	39,000
	RGT	24.	6	48	1.7	55	4X4X18	42	5,000	39,000	40,000
27	RGT	27.	2	55	1.7	55	4X4X18	76	4,900	13,400	35,000
	RGT	27.	4	55	1.7	55	4X4X18	53	4,900	26,500	41,500
	RGT	27.	5	55	1.7	55	4X4X18	47	4,900	33,000	43,000
	RGT	27.	6	55	1.7	55	4X4X18	43	4,900	39,500	44,500
	RGT	27.	8	55	1.7	55	4X4X18	37	4,900	53,000	45,500
30	RGT	30.	2	62	1.7	55	5X5X22	78	4,700	13,500	38,000
	RGT	30.	4	62	1.7	55	5X5X22	54	4,700	27,000	45,000
	RGT	30.	5	62	1.7	55	5X5X22	48	4,700	33,500	47,000
	RGT	30.	6	62	1.7	55	5X5X22	44	4,700	40,000	48,500
	RGT	30.	8	62	1.7	55	5X5X22	38	4,700	53,000	50,000
36	RGT	36.	2	75	1.7	68	5X5X22	108	4,400	18,300	65,000
	RGT	36.	4	75	1.7	68	5X5X22	74	4,400	36,000	78,000
	RGT	36.	5	75	1.7	68	5X5X22	65	4,400	45,000	82,000
	RGT	36.	6	75	1.7	68	5X5X22	59	4,400	54,000	85,000
	RGT	36.	8	75	1.7	68	5X5X22	51	4,400	72,000	89,000
39	RGT	39.	2	80	1.7	72	5X5X25	117	4,200	19,800	76,000
	RGT	39.	4	80	1.7	72	5X5X25	80	4,200	39,500	92,000
	RGT	39.	5	80	1.7	72	5X5X25	71	4,200	49,000	97,000
	RGT	39.	10	80	1.7	72	5X5X25	56	4,200	97,000	109,000
48	RGT	48.	5	96	2.7	95	6X6X40	91	3,800	62,000	155,000
	RGT	48.	10	96	2.7	95	6X6X40	63	3,800	124,000	178,000
63	RGT	63.	5	118	3.5	115	8X7X45	116	3,000	78,000	250,000
	RGT	63.	10	118	3.5	115	8X7X45	80	3,000	155,000	295,000

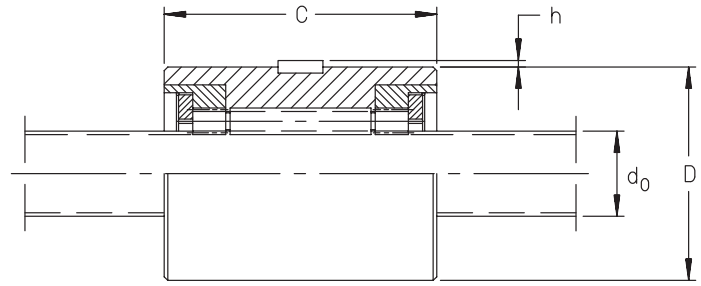
1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.

*) Available on request.

Planetary Roller Screw

RGT SERIES

- One-piece roller nut, not preloaded
- Special ends configuration*)



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

DIMENSION TABLE - Dimensions in mm											
NOMINAL DIAMETER d_0	PART NUMBER d_0	PITCH P	NUT DIMENSIONS			KEY TO DIN 6885	SPRING RATIO C_K $N^{2/3} / \mu m$	LIMITING SPEED ¹⁾ n_g grease rpm	LOAD RATINGS		
			D ISO g6	h	C h12				dyn. C N	stat. C_0 N	
24	RGT	24.	2	48	1.7	55	4X4X18	124	5,000	22,400	69,000
	RGT	24.	4	48	1.7	55	4X4X18	86	5,000	44,500	80,000
	RGT	24.	5	48	1.7	55	4X4X18	64	5,000	55,000	83,000
	RGT	24.	6	48	1.7	55	4X4X18	69	5,000	66,000	85,000
27	RGT	27.	2	55	1.7	55	4X4X18	127	4,900	22,700	75,000
	RGT	27.	4	55	1.7	55	4X4X18	87	4,900	45,000	88,000
	RGT	27.	5	55	1.7	55	4X4X18	78	4,900	56,000	92,000
	RGT	27.	6	55	1.7	55	4X4X18	71	4,900	67,000	94,000
	RGT	27.	8	55	1.7	55	4X4X18	61	4,900	89,000	98,000
30	RGT	30.	2	62	1.7	55	5X5X22	130	4,700	23,000	81,000
	RGT	30.	4	62	1.7	55	5X5X22	89	4,700	45,500	96,000
	RGT	30.	5	62	1.7	55	5X5X22	79	4,700	57,000	100,000
	RGT	30.	6	62	1.7	55	5X5X22	72	4,700	68,000	103,000
	RGT	30.	8	62	1.7	55	5X5X22	62	4,700	90,000	107,000
36	RGT	36.	2	75	1.7	68	5X5X22	176	4,400	31,000	136,000
	RGT	36.	4	75	1.7	68	5X5X22	121	4,400	61,000	165,000
	RGT	36.	5	75	1.7	68	5X5X22	107	4,400	76,000	173,000
	RGT	36.	6	75	1.7	68	5X5X22	97	4,400	91,000	179,000
	RGT	36.	8	75	1.7	68	5X5X22	84	4,400	121,000	188,000
39	RGT	39.	2	80	1.7	72	5X5X25	191	4,200	33,000	159,000
	RGT	39.	4	80	1.7	72	5X5X25	131	4,200	66,000	193,000
	RGT	39.	5	80	1.7	72	5X5X25	116	4,200	82,000	203,000
	RGT	39.	10	80	1.7	72	5X5X25	91	4,200	163,000	228,000
48	RGT	48.	5	96	2.7	95	6X6X40	148	3,800	104,000	320,000
	RGT	48.	10	96	2.7	95	6X6X40	103	3,800	206,000	370,000
63	RGT	63.	5	118	3.5	115	8X7X45	188	3,000	129,000	520,000
	RGT	63.	10	118	3.5	115	8X7X45	129	3,000	255,000	610,000

1) Limiting speed of the planetary roller screw. Critical speed n_{max} and limiting speed of the rolling bearings should be considered.

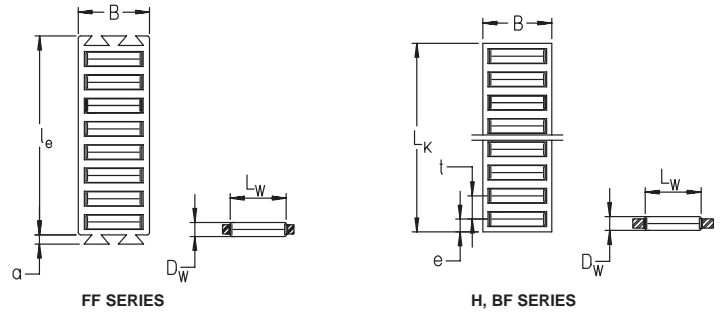
*) Available on request.

INA-HYDREL

Flat Cage Assemblies

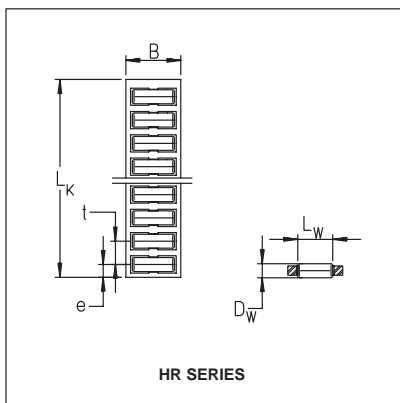
FF, H, BF, HR SERIES

- Single row



For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.
 For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

PART NUMBER				WGT.	B	D _w	L _w	t	e	a	L _k max.	l ₃	Z _e ROLLERS PER CAGE	DYN. LOAD PER 10 ROLLERS C	STAT. LOAD PER 10 ROLLERS C ₀
				g/L _k =1000 mm	mm	mm	mm	mm	mm	mm	mm	mm	Number	N	N
FF2010	-	-	-	46	10	2	6.8	-	-	2	-	32	7	11800	28000
-	H10	-	-	63	10	2	6.8	4.5	3.5	-	3000	-	-	11800	28000
FF2515	-	-	-	84	15	2.5	9.8	-	-	2.5	-	45	8	21200	52000
-	H15	-	-	120	15	2.5	9.8	5	3.5	-	3000	-	-	21200	52000
FF3020	-	-	-	148	20	3	13.8	-	-	3	-	60	9	35500	88000
-	H20	-	-	202	20	3	13.8	6	4.5	-	3000	-	-	35500	88000
-	-	BF3020	-	342	20	3	15.8	6	4.5	-	2000	-	-	39500	102000
FF3525	-	-	-	221	25	3.5	17.8	-	-	3	-	75	10	53000	132000
-	H25	-	-	294	25	3.5	17.8	7	5	-	3000	-	-	53000	132000
-	-	BF5015	-	375	15	5	11.8	8	5.5	-	2000	-	-	60000	123000
-	-	BF5023	-	530	23	5	19.8	8	5.5	-	2000	-	-	91000	211000
-	-	BF5032	-	722	32	5	27.8	8	5.5	-	2000	-	-	119000	300000
-	-	-	HR50	105	10.5	5	5	10	6.5	-	3000	-	-	30000	51000
-	-	BF7028	-	875	28	7	24	11	7.5	-	2000	-	-	165000	365000
-	-	BF7035	-	1080	35	7	30	11	7.5	-	2000	-	-	197000	455000
-	-	-	HR70	295	17	7	10	13	8.5	-	3000	-	-	82000	148000
-	-	-	HR100	598	24	10	14	17	10	-	3000	-	-	169000	295000
-	-	BF12022	-	1220	22	12	18	16	10	-	2000	-	-	260000	460000
-	-	BF12040	-	1970	40	12	36	16	10	-	2000	-	-	455000	930000

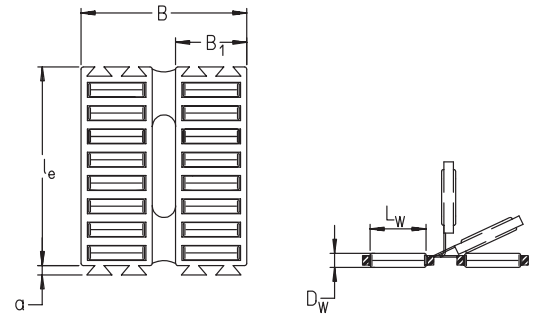


INA-HYDREL

Flat Cage Assemblies

FF..ZW, H..ZW, HR..ZW SERIES

- Double row

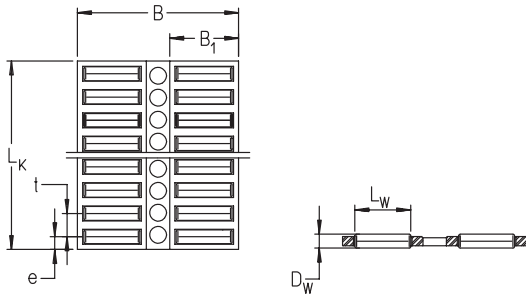


FF..ZW SERIES

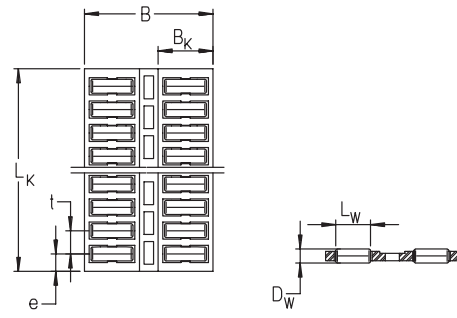
For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

PART NUMBER			WGT.	B	B ₁	D _w	L _w	t	e	a	L _k max.	I ₃	Z _e ROLLERS PER CAGE	DYN. LOAD PER 10 ROLLERS C N	STAT. LOAD PER 10 ROLLERS C ₀ N
			g/L _k =1000 mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Number		
FF 2025 ZWA	-	-	94	25	10	2	6.8	-	-	2	-	32	7	20200	56000
-	H 24 ZW	-	138	24	10.5	2	6.8	4.5	3.5	-	3000	-	-	20200	56000
FF 2535 ZW	-	-	182	35	15	2.5	9.8	-	-	2.4	-	45	8	36500	103000
-	H 34 ZW	-	239	33.5	14.3	2.5	9.8	5.5	4	-	3000	-	-	36500	103000
FF 3045 ZW	-	-	315	45	20	3	13.8	-	-	3	-	60	9	61000	177000
-	H 44 ZW	-	408	44	19	3	13.8	6	4.5	-	3000	-	-	61000	177000
FF 3555 ZW	-	-	464	55	25	3.5	17.8	-	-	3.2	-	75	10	90000	265000
-	H 55 ZW	-	598	55	24	3.5	17.8	7	5	-	3000	-	-	90000	265000
-	-	HR 50 ZW	215	24	10.5	5	5	10	6.5	-	3000	-	-	51000	101000
-	-	HR 70 ZW	602	40	17	7	10	13	8.5	-	3000	-	-	141000	295000
-	-	HR 100 ZW	1233	55	24	10	14	17	10	-	3000	-	-	290000	590000



H..ZW SERIES



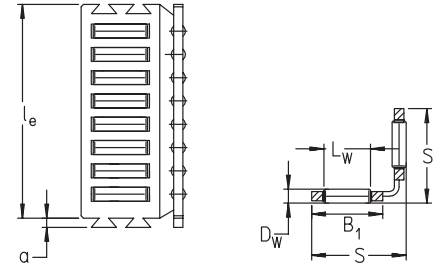
HR..ZW SERIES

INA-HYDREL

Angled Flat Cage Assemblies

FFW, HW, HRW SERIES

- Double row with 90° bend



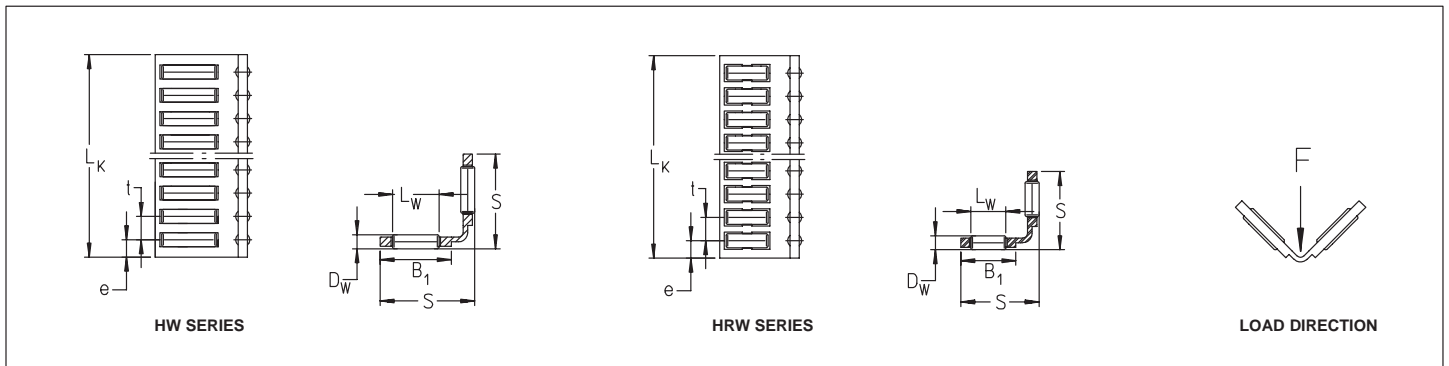
FFW SERIES

For details on part numbers, descriptive suffixes and various technical references, please refer to front of this section.

For engineering or technical information contact your local sales representative or call Distributor Sales (800)523-6572 or Linear Sales (800)462-3399.

PART NUMBER			WGT.	S	B ₁	D _w	L _w	t	e	a	L _k max.	l ₃	Z _e ROLLERS PER CAGE Number	DYN. LOAD PER 10 ROLLERS C N	STAT. LOAD PER 10 ROLLERS C ₀ N
			g/L _k =1000 mm	mm	mm	mm	mm	mm	mm	mm	mm	mm			
FFW 2025 ZWA	HW10	–	219	10	8	2	4.8	4	3	–	1000	–	–	10700	27400
	–	–	94	15	10	2	6.8	–	–	2	–	32	7	14300	40000
	HW15	–	138	15	10.5	2	6.8	4.5	3.5	–	3000	–	–	14300	40000
FFW 2535	–	–	182	20.5	15	2.5	9.8	–	–	2.4	–	45	8	25500	73000
	HW20	–	239	20	14.3	2.5	9.8	5.5	4	–	3000	–	–	25500	73000
FFW 3045	–	–	315	26	20	3	13.8	–	–	3	–	60	9	43000	125000
	HW25	–	408	25	19	3	13.8	6	4.5	–	3000	–	–	43000	125000
FFW 3555	–	–	464	31.5	25	3.5	17.8	–	–	3.2	–	75	10	64000	187000
	HW30	–	598	30	24	3.5	17.8	7	5	–	3000	–	–	64000	187000
–	–	HRW 50	215	15.5	10.5	5	5	10	6.5	–	3000	–	–	36500	72000
–	–	HRW 70	602	25	17	7	10	13	8.5	–	3000	–	–	99000	209000
–	–	HRW100	1233	34	24	10	14	17	10	–	3000	–	–	205000	415000

The basic load ratings are valid for the condition that the two sections of the cage are symmetrical to the load direction (see diagram below).



NOTES



INA SALES OFFICES MANUFACTURING PLANTS

SALES OFFICES

TORONTO, CANADA

INA Canada Inc.
2871 Plymouth Drive
Oakville, Ontario L6H 5S5
Toll Free: 800-263-4397

Telephone: 905-829-2750
Fax: 905-829-2563

MONTREAL, CANADA

INA Canada Inc.
149 Avenue Guthrie
Dorval, Quebec H9P 2P1
Toll Free: 800-361-7015

Telephone: 514-631-2214
Fax: 514-631-9571

VANCOUVER, CANADA

INA Canada Inc.
106-1668 Derwent Way
Delta, British Columbia, V3M R9
Toll Free: 800-663-9006

Telephone: 604-526-3500
Fax: 604-526-6544

MEXICO CITY, MEXICO

INA Mexico, S.A. de C.V.
Paseo de la Reforma 383-704
Col. Cuauhtemoc
06500 Mexico D.F.
Telephone: 525-525-00-12 / 01-84
Fax: 525-525-01-94

OTHER COUNTRIES

Argentina	Italy
Australia	Japan
Austria	Korea
Belgium	Netherlands
Brazil	Norway
Denmark	Portugal
Finland	South Africa
France	Spain
Germany	Sweden
Great Britain	Turkey

MANUFACTURING PLANTS

PARENT COMPANY

INA Waelzlager Schaeffler oHG
Industriestrasse 1-3
P.O. Box 1220
D-91074 Herzogenaurach
Germany
Telephone: (49132) 82-0
Fax: (49132) 82 49 33

UNITED STATES

PLANT I
INA USA Corporation
One INA Drive
P.O. Box 390
Cheraw, South Carolina 29520
Telephone: 843-537-9341/9346
Fax: 843-537-8751

PLANT II
INA USA Corporation
Highway 9 West
P.O. Box 390
Cheraw, South Carolina 29520
Telephone: 843-537-9341
Fax: 843-537-8752

PLANT III
INA USA Corporation
308 Springhill Farm Road
Fort Mill, South Carolina 29715
Telephone: 803-547-7990
Fax: 803-548-8597

PLANT IV
INA USA Corporation
New Cut Road, P.O. Box 570
Spartanburg, South Carolina 29304
Telephone: 864-583-4541
Fax: 864-591-8890

PLANT V
INA USA Corporation
200 Evans Row
Cheraw, South Carolina 29520
Telephone: 843-537-9341
Fax: 843-537-8751

OTHER COUNTRIES

Australia	Great Britain
Brazil	Italy
Canada	Korea
China	Slovakia
France	Spain
Germany	Switzerland

USA SALES OFFICES

ATLANTA

1870 The Exchange, Suite 100
Atlanta, Georgia 30339
Telephone: 770-951-7015
Fax: 770-951-7092

BUFFALO

336 Harris Hill Road, Suite 100
Williamsville, New York 14221
Telephone: 716-631-1533
Fax: 716-631-8741

CHARLOTTE

377 Carowinds Boulevard, Suite 120
Fort Mill, South Carolina 29708
Telephone: 803-547-7970
Fax: 803-548-6361

CHICAGO

2525 Cabot Drive, Suite 202
Lisle, Illinois 60532
Telephone: 630-955-9360
Fax: 630-955-9365

CLEVELAND

12306 Woodward Boulevard
Garfield Heights, Ohio 44125
Telephone: 216-587-4393
Fax: 216-587-2655

DALLAS

3939 Belt Line Road, Suite 365
Addison, Texas 75001
Telephone: 972-488-2544
Fax: 972-488-2802

DAYTON

261 Regency Ridge Drive
Centerville, Ohio 45459
Telephone: 937-433-6404
Fax: 937-433-6814

DETROIT

335 East Big Beaver Road, Suite 101
Troy, Michigan 48083
Telephone: 248-528-9080
Fax: 248-619-2139

FLINT

771A E. Main Street, P.O. Box 666
Flushing, Michigan 48433
Telephone: 810-659-3607
Fax: 810-659-4771

HARTFORD

1799 Farmington Ave., Bldg. B-2, P.O. Box 528
Unionville, Connecticut 06085
Telephone: 860-673-5236
Fax: 860-673-5270

HOUSTON

10101 Southwest Freeway, Suite 400
Houston, Texas 77074
Telephone: 713-219-1430
Fax: 713-219-1431

INDIANAPOLIS

7301 Elm Ridge Road
Indianapolis, Indiana 46236
Telephone: 317-823-7268
Fax: 317-823-7269

KANSAS CITY

4201 N.E. Lakewood Way, Suite 101
Lee's Summit, Missouri 64064
Telephone: 816-795-9311
Fax: 816-795-9322

LOS ANGELES

767 North Main Street
Orange, California 92868
Telephone: 714-744-1022
Fax: 714-744-2640

LOUISVILLE

14419 Micawber Way
Louisville, Kentucky 40245
Telephone: 502-254-9590
Fax: 502-254-2760

MEMPHIS

1922 Exeter Road, Suite 20
Germantown, Tennessee 38138
Telephone: 901-756-0023
Fax: 901-756-0260

MILWAUKEE

N16 W23233 Stoneridge Drive, Suite 220
Waukesha, Wisconsin 53188
Telephone: 414-544-8270
Fax: 414-544-8271

MINNEAPOLIS

80 W. 78th Street, Suite 270C
Chanhassen, Minnesota 55317
Telephone: 612-934-8822
Fax: 612-934-8833

PHILADELPHIA

3399 Progress Drive
Bensalem, Pennsylvania 19020
Telephone: 215-245-3485
Fax: 215-245-7779

PHOENIX

11024 N. 28th Street, Suite 208
Phoenix, Arizona 85029
Telephone: 602-588-9304
Fax: 602-588-9318

QUAD CITIES

300 Northwest Banktower
2550 Middle Road Bettendorf, Iowa 52722
Telephone: 319-355-0383
Fax: 319-355-1937

RICHMOND

8003 Franklin Farms Drive, Suite 229B
Richmond, Virginia 23229
Telephone: 804-527-0901
Fax: 804-527-0992

SAN FRANCISCO

3478 Buskirk Avenue, Suite 1043
Pleasant Hill, California 94523
Telephone: 925-746-7103
Fax: 925-946-9936

SEATTLE

40 Lake Bellevue, Suite 100
Bellevue, Washington 98005
Telephone: 425-646-9477
Fax: 425-646-9471

TAMPA

25327 Celmar Street
Brooksville, Florida 34601
Telephone: 352-797-0620
Fax: 352-797-0630

Corporate Offices

INA USA CORPORATION
308 Springhill Farm Road
Fort Mill, South Carolina 29715
Telephone: 803-548-8500 Fax: 803-548-8599

INA LINEAR TECHNIK
A Division Of INA USA Corporation
247 Rittenhouse Circle
Bristol, Pennsylvania 19007
Telephone: 215-781-6900 Fax: 215-781-9830