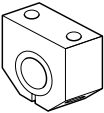
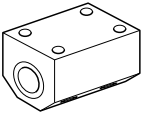
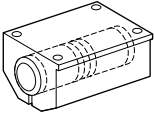
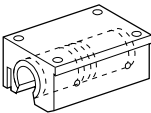
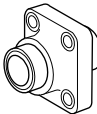
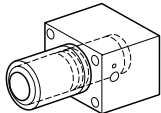
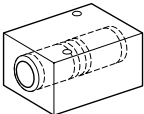
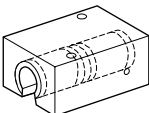
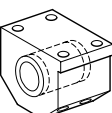
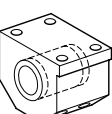
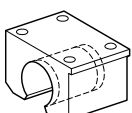
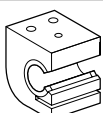
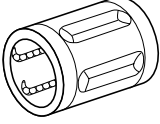
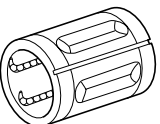
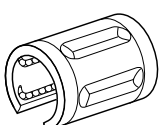
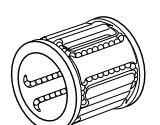
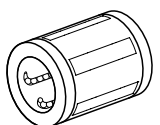
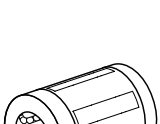
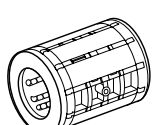
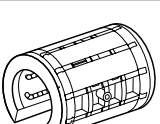




### COMPARISON TABLE LINEAR SETS: BOSCH REXROTH - INA

Linear bushings are equipped with two seals. INA linear bushings are supplied with initial greasing. INA linear sets except for KGHA..-PP are regreaseable (they have a lubrication hole).

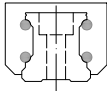
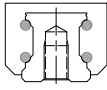
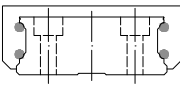
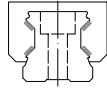
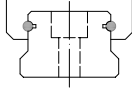
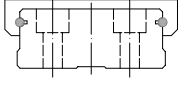
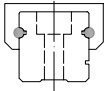
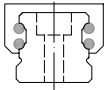
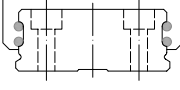
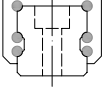
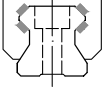
Sketch*	BOSCH Rexroth		INA	
	Article	Standard sizes	Article	Standard sizes
	<b>Closed compact linear sets</b>			
	R1027 ... / LSAC	12-50	KGHA..-PP KGHK..-PP-AS	16-40 6-50
	<b>Closed compact linear sets, two compact linear bushings</b>			
	R1029 ... / LSACT	12-50	KTHK..-PP-AS	12-50
	<b>Closed linear sets, two self-aligning linear bushings, adjustable clearance</b>			
	R1032 ... / LSATE	10-50	KTSS..-PP-AS	12-30
	<b>Open linear sets, two self-aligning linear bushings, adjustable clearance</b>			
	R1034 ... / LSATOE	12-50	KTSOS..-PP-AS	12-30
	<b>Flanged linear sets, one linear bushing</b>			
	R1081 ... / LSGF self-aligning	12-50	KFB..-PP-AS not self-aligning	12-50
	<b>Flanged linear sets, two self-aligning linear bushings</b>			
	R1083 ... / LSAFT	12-30	KTFS..-PP-AS	12-30
	<b>Closed linear sets, two linear bushings</b>			
	R1085 ... / LSAT self-aligning	12-50	KTB..-PP-AS not self-aligning KTSG..-PP-AS self-aligning	12-50 12-30
	<b>Open linear sets, two linear bushings</b>			
	R1087 ... / LSATO self-aligning	12-50	KTBO..-PP-AS not self-aligning KTSO..-PP-AS self-aligning	12-50 12-30
	<b>Closed linear sets with a heavy-duty, self-aligning linear bushing</b>			
	R1701 ... / LSAH	20-60	KGSNG..-PP-AS	12-50
	<b>Closed linear sets, adjustable, with a heavy-duty, self-aligning linear bushing</b>			
	R1702 ... / LSAHE	20-60	KGSNS..-PP-AS	12-50
	<b>Open linear sets, adjustable, with a heavy-duty, self-aligning linear bushing</b>			
	R1703 ... / LSAHO	20-60	KGSNO..-PP-AS	12-50
	R1704 ... / LSAHOE	20-60	KGSNOS..-PP-AS	12-50
	<b>Linear sets open on the side, adjustable, with a heavy-duty, self-aligning linear bushing</b>			
	R1706 ... / LSAHSE	20-50	KGSC..-PP-AS KGSCS..-PP-AS	20-50 20-50

## COMPARISON TABLE LINEAR BUSHINGS AND SHAFT SUPPORT BLOCKS: BOSCH REXROTH - INA



Sketch*	BOSCH Rexroth		INA	
	Article	Standard sizes / Type	Article	Standard sizes / Type
<b>STANDARD LINEAR BUSHINGS</b>				
<b>Closed</b>				
	<b>R060. ... / KBM</b> R0600 ... / KBM- R0601 ... / KBM-...-D R0602 ... / KBM-...-DD	<b>3-80</b> without seals with a seal with two seals	<b>KB</b> - -PP -PP-AS	<b>12-50</b> conserved initial greasing, seals on both sides initial greasing, seals on both sides, regreasable
<b>Adjustable</b>				
	<b>R061. ... / KBM-E</b> R0610 ... / KBM-E-... R0611 ... / KBM-E-...-D R0612 ... / KBM-E-...-DD	<b>5-80</b> without seals with a seal with two seals	<b>KBS</b> - -PP -PP-AS	<b>12-50</b> conserved initial greasing, seals on both sides initial greasing, seals on both sides, regreasable
<b>Open</b>				
	<b>R063. ... / KBM-O</b> R0630 ... / KBM-O-... R0631 ... / KBM-O-...-D R0632 ... / KBM-O-...-DD	<b>12-80</b> without seals with a seal with two seals	<b>KBO</b> - -PP -PP-AS	<b>12-50</b> conserved initial greasing, seals on both sides initial greasing, seals on both sides, regreasable
<b>COMPACT LINEAR BUSHINGS</b>				
	<b>R0658 ... / KBC</b> R0658 0... / KBC-... R0658 1... / KBC-...-D R0658 2... / KBC-...-DD	<b>8-50</b> without seals with a seal with two seals	<b>KH</b> - -PP	<b>6-50</b> conserved initial greasing, seals on both sides
<b>SELF-ALIGNING SUPER LINEAR BUSHINGS</b>				
<b>Closed</b>				
	<b>R0670 ... / KBA</b> R0670 0... / KBA-... R0670 1... / KBA-...-D R0670 2... / KBA-...-DD	<b>10-50</b> without seals with a seal with two seals	<b>KN</b> ...-B ...-B-PP <b>KS</b> - -PP	<b>Leightweight series 12-50</b> non-sealed, regreasable sealed on all sides, regreasable <b>Heavy-duty series 12-50</b> conserved, gap seals on both sides, regreasable initial greasing, lip seals on both sides, regreasable
<b>Open</b>				
	<b>R0671 ... / KBA-O</b> R0671 0... / KBA-O-... R0671 1... / KBA-O-...-D R0671 2... / KBA-O-...-DD	<b>12-50</b> without seals with a seal with two seals	<b>KNO</b> ...-B ...-B-PP <b>KSO</b> - -PP	<b>Leightweight series 12-50</b> non-sealed, regreasable sealed on all sides, regreasable <b>Heavy-duty series 12-50</b> conserved, gap seals on both sides, regreasable initial greasing, lip seals on both sides, regreasable
<b>HEAVY-DUTY LINEAR BUSHINGS</b>				
<b>Closed</b>				
	<b>R0732 ... / KBH</b> R0732 0... / KBH-... R0732 1... / KBH-...-D R0732 2... / KBH-...-DD	<b>20-60</b> without seals with a seal with two seals	<b>KS</b> - -PP	<b>12-50</b> conserved, gap seals on both sides, regreasable initial greasing, lip seals on both sides, regreasable
<b>Open</b>				
	<b>R0733 ... / KBH-O</b> R0733 0... / KBH-O-... R0733 1... / KBH-O-...-D R0733 2... / KBH-O-...-DD	<b>20-60</b> without seals with a seal with two seals	<b>KSO</b> - -PP	<b>12-50</b> conserved, gap seals on both sides, regreasable initial greasing, lip seals on both sides, regreasable
<b>SHAFT SUPPORT BLOCKS</b>				
	<b>R1055 ... / WBG</b>	<b>8-80</b> spheroidal graphite cast iron	<b>GW</b> <b>GWA...-B</b>	<b>10-50</b> zinc die-cast, space-saving <b>10-50</b> zinc die-cast, for larger fixing screws, space-saving
	<b>R1058 ... / WBA</b>	<b>12-50</b> aluminum, low height	<b>GWH...-B</b>	<b>6-50</b> aluminum, low shaft position

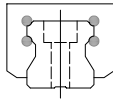
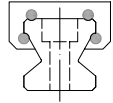
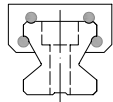
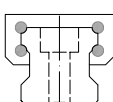
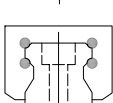
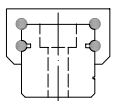
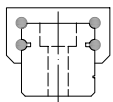
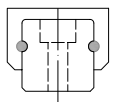
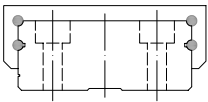
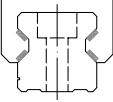
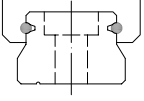
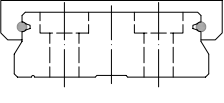
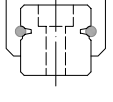
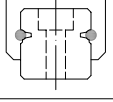
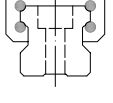
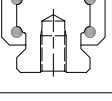
The data sheets on the next 2 pages contain our linear motion offer at the time of publication of the PICARD NET PRICE LIST.

In case you do not find your requested series/items, please contact your personal Area Account Manager.

Brand	Guide rail	Profile	Guide carriage	Standard size	Assembly
BOSCH Rexroth	R1605 .... KSA-O		R16.. .... KWC/KWD	15-65	-
	R1607 .... KSA-U		R16.. .... KWC/KWD	15-65	-
	R1675 .... KSA-BNS		R167. .... KWC/KWD	20-35	-
	R1805 .... RSA-O		R18.. .... RWA/RWD	25-65	-
	R0445 .... MSA-SNS		R044. .... MWA	7-20	-
	R0455 .... MSA-BNS		R044. .... MWA	9-15	-
INA	TKD		KWE	15-35	KUE
	TKVD		KWVE	15-55	KUVE
	TKVD-W		KWVE-W	15-35	KUVE-W
	TKSD		KWSE	20-45	KUSE
	TSX		RWU	25-65	RUE

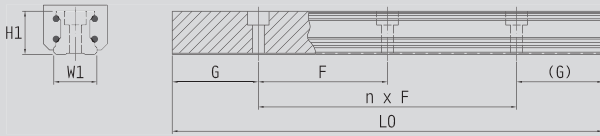
## SHAFTS

Brand	Shaft	Profile	Standard size	
INA	W		4-80	
	WH		12-80	

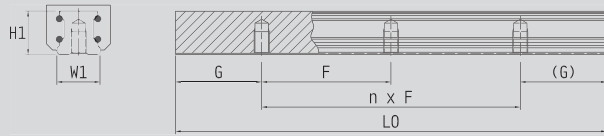
Brand	Guide rail	Profile	Guide carriage	Standard size	Assembly
THK	HSR		HSR	15-55	HSR
	SR		SR	15-55	SR
	SR		SSR	15-35	SSR
	SHS		SHS	15-65	SHS
	HSV/(HSR-Ct)		HSV/(HSR-Ct)	15-45	HSV/(HSR-Ct)
NSK	N1H/(L1H)		NAH/(LAH)	15-65	NH/(LH)
	N1S/(L1S)		NAS/(LAS)	15-35	NS/(LS)
	T1S		TAS	15-35	TS
	L1W		LAW	17-50	LW
	R1A		RAA	15-65	RA
	P1E		PAE	5-12	PE
	P1E		PAE	15	PE
	P1U		PAU	5-15	PU
	L1U		LAU	15	LU
SKF	LLTHR		LLTHC	15-45	LLTHS
	LLTHR-D4		LLTHC	15-45	LLTHS-D4

# BOSCH Rexroth

## BALL GUIDES



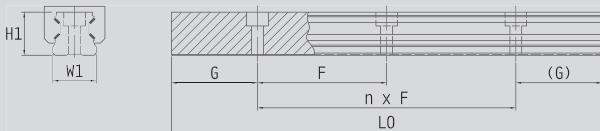
**R1605 .0... / KSA-O four-row, mounting from above**  
Standard sizes 15-65



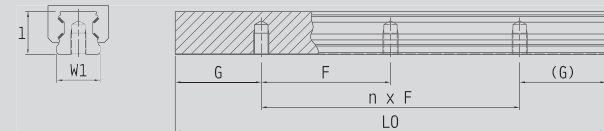
**R1607 .0... / KSA-U four-row, mounting from below**  
Standard sizes 15-65

R1605 .0... / R1607 .0...					Accuracy Classes		BOSCH Rexroth Ball Runner Blocks			Preload Classes		
Sizes	Dimensions in mm			Weight	Ball Guides		Criterion	Description	Code	Ball Runner Blocks		
	H1	W1	F	kg/m	N*	Normal class				C0	Without	
15	16,2	15	60	1,4	H	High class	Width	Flanged	F	C1	Light	
20	20,55	20	60	2,4	P	Precision class		Slimline	S		C2	Middle
25	24,25	23	60	3,2	XP	Extra precision class		Wide	B			C3
30	28,35	28	80	5,0	SP	Super precision class	Length	Compact	C	N		
35	31,85	34	80	6,8	UP	Ultra precision class		Normal			L	
45	39,85	45	105	10,5	* Standard class N			Long				K
55	47,85	53	120	16,2			Short					
65	59,85	63	150	22,4			Height	Standard		S		
									High		H	
									Low		N	

## ROLLER GUIDES



**R1805 .5... / RSA-O four-row, mounting from above**  
Standard sizes 25-65

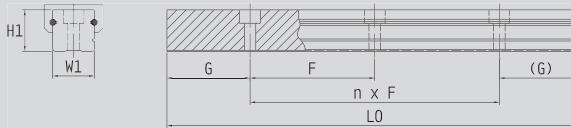


**R1807 .0... / RSA-U four-row, mounting from below**  
Standard sizes 25-65

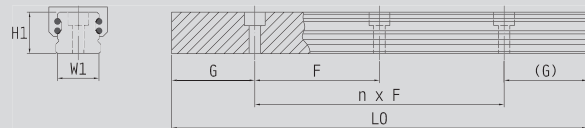
R1805 .5... / R1807 .0...					Accuracy Classes		BOSCH Rexroth Roller Runner Blocks			Preload Classes		
Sizes	Dimensions in mm			Weight	Roller Guides		Criterion	Description	Code	Roller Runner Blocks		
	H1	W1	F	kg/m	H*	High class				C1	Special design	
25	23,40	23	30	3,1	P	Precision class	Width	Flanged	F	C2	Middle	
30	27,80	28	40	4,3	SP	Super precision class		Slimline	S		C3	High
35	30,80	34	40	6,3	UP	Ultra precision class		Wide	B			C4
45	38,80	45	52,5	10,3	* Standard class H		Length	Compact	C	C5	Special design	
55	47,55	53	60	13,1				Normal			N	
65	57,85	63	75	17,4				Long				L
							Height	Extra-long		X		
									Standard			S
									High		H	

# INA

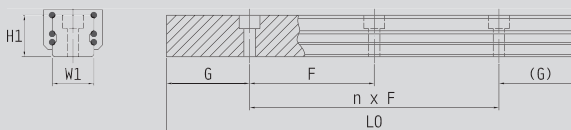
## BALL GUIDES



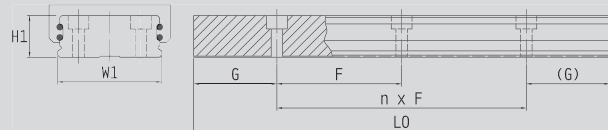
**TKD two-row**  
Standard sizes 15-35



**TKVD four-row**  
Standard sizes 15-55



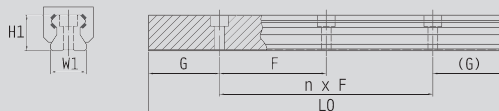
**TKSD six-row**  
Standard sizes 20-45



**TKVD-W four-row, wide**  
Standard sizes 15-35

TKD two-row					TKVD four-row					TKSD six-row					TKVD-W four-row, wide				
Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight
	H1	W1	F	kg/m		H1	W1	F	kg/m		H1	W1	F	kg/m		H1	W1	F	kg/m
15	15	15	60	1,5	15	15	15	60	1,44	20	18	20	60	2,3	15	12,9	37	50	3,6
20	16,5	20	60	2,2	20	17	20	60	2,2	25	21,7	23	60	3,1	20	17	42	60	5
25	18	23	60	2,8	25	18,7	23	60	2,7	30	25	28	80	4,4	25	18,7	69	80	9,4
30	21,5	28	80	4,2	30	23,5	28	80	4,3	35	29,7	34	80	6,5	30	23,5	80	80	13,6
35	23	34	80	5,6	35	27	34	80	5,7	45	37,2	45	105	11,3	35	27	90	80	17,4
					45	34,2	45	105	9,2										
					55	41,5	53	120	14										

## ROLLER GUIDES



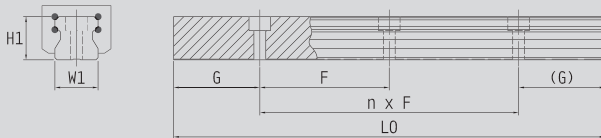
**TSX four-row**  
Standard sizes 25-65

TSX four-row					Accuracy Classes		INA Guide Carriages			Preload Classes	
Sizes	Dimensions in mm			Weight	Ball Guides		Criterion	Description	Code	Guide Carriages	
	H1	W1	F	kg/m	G4	Lowest precision class	Width	Wide Slimline Standard	W S *	V0	Very light
25	22,3	23	30	3,3	G3	Standard class	Length	Standard Long Short	*	V1	Light
35	30	34	40	5,9	G2	Higher precision class	Height	Standard High Low	* H N	V2	Middle
45	38	45	52,5	9,4	G1	Highest precision class	Fixing thread		SB	V3	High
55	45	53	60	13,1	Roller Guides		⚠	High Speed	HS		
65	53,8	63	75	21,5	G3	Lowest precision class					
					G2	Standard class					
					G1	Higher precision class					
					G0	Highest precision class					

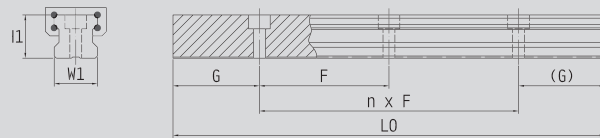
\* If a carriage has no suffix, it has a standard design.

# THK

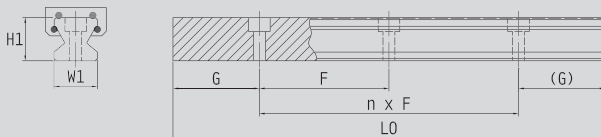
### BALL GUIDES



**HSR four-row / HSV/(HSR-Ct) four-row**  
Standard sizes 15-55



**SHS four-row**  
Standard sizes 15-65



**SR four-row**  
Standard sizes 15-55

#### HSR four-row/HSV four-row

Sizes	Dimensions in mm			Weight kg/m
	H1	W1	F	
15	15	15	60	1,5
20	18	20	60	2,3
25	22	23	60	3,3
30	26	28	80	4,8
35	29	34	80	6,6
45	38	45	105	11
55	44	53	120	15,1

#### SHS four-row

Sizes	Dimensions in mm			Weight kg/m
	H1	W1	F	
15	13	15	60	1,3
20	16,5	20	60	2,3
25	20	23	60	3,2
30	23	28	80	4,5
35	26	34	80	6,2
45	32	45	105	10,4
55	38	53	120	14,5
65	53	63	150	23,7

#### SR four-row

Sizes	Dimensions in mm			Weight kg/m
	H1	W1	F	
15	12,5	15	60	1,2
20	15,5	20	60	2,1
25	18	23	60	2,7
30	23	28	80	4,3
35	27,5	34	80	6,4
45	35,5	45	105	11,3
55	38	48	120	12,8

#### Accuracy Classes

Ball Guides	
(no symbol)*	Normal
H	High
P	Precision class
SP	Super precision class
UP	Ultra precision class

\* Standard class

#### THK Guide Carriages

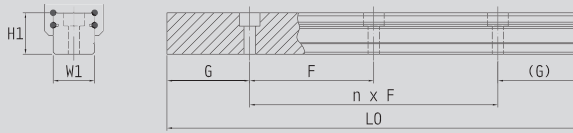
Criterion	Description	Code				
		SHS	SSR	SR	HSR	HSV
Width	Flanged	C	XTB	TB	A,B	C
	Slimline	V	XW	W	R	R
	Standard	-	-	-	-	-
Length	Standard	-	-	-	-	-
	Long	L	-	-	L, H	-
	Short	-	XV	V, SB	-	-
Height	Standard	-	-	-	-	-
	High	R	-	-	-	-
	Low	-	-	-	-	-
Mounting	At the side	-	-	-	Y	-

#### Preload Classes

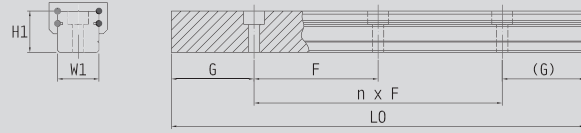
Guide Carriages	
(no symbol)	Normal
C1	Light
C0	Middle

# NSK

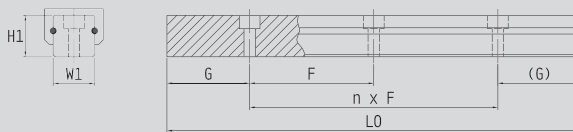
## BALL GUIDES



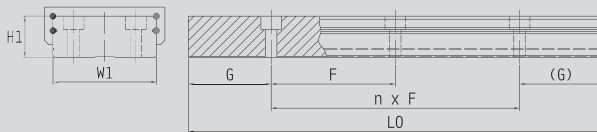
**N1H/(L1H) four-row**  
Standard sizes 15-65



**N1S/(L1S) four-row**  
Standard sizes 15-35



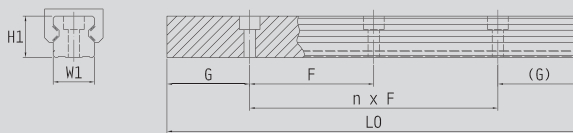
**T1S two-row**  
Standard sizes 15-35



**L1W four-row, wide**  
Standard sizes 17-50

N1H/(L1H) four-row					N1S/(L1S) four-row					T1S two-row					L1W four-row, wide				
Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight
	H1	W1	F	kg/m		H1	W1	F	kg/m		H1	W1	F	kg/m		H1	W1	F	kg/m
15	15	15	60	1,6	15	12,5	15	60	1,4	15	14	15	120	1,5	17	8,7	33	40	2,1
20	18	20	60	2,6	20	15,5	20	60	2,3	20	15	20	120	2,1	21	10,5	37	50	2,9
25	22	23	60	3,6	25	18,0	23	60	3,1	25	20	23	120	3,4	27	15	42	60	4,7
30	26	28	80	5,2	30	23,0	28	80	4,8	30	25	28	160	5,3	35	19	69	80	9,6
35	29	34	80	7,2	35	27,5	34	80	7,0	35	30	34	160	7,7	50	24	90	80	15,8
45	38	45	105	12,3															
55	44	53	120	16,9															
65	53	63	150	24,3															

## ROLLER GUIDES



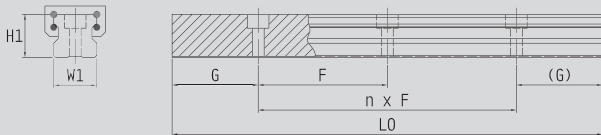
**R1A four-row**  
Standard sizes 15-65

R1A four-row					Accuracy Classes		NSK Guide Carriages			Preload Classes	
Sizes	Dimensions in mm			Weight	Ball and Roller Guides		Criterion	Description	Code	Guide Carriages	
	H1	W1	F	kg/m	PN*/PC*	Normal	Width	Flanged Slimline Standard	M S -	Z0/ZT	Without/light preload
15	16,3	15	30	1,6	P6*	Precision class	Length	Standard Long Short	A, E B, G C, J	Z1/ZZ	Light
20	20,8	20	30	2,6	P5/PH	High				Z3/ZH	Middle
25	24	23	30	3,4	P4	Super	Height	Low High	L N	Z4	High
30	28	28	40	4,9	P3	Ultra					
35	31	34	40	6,8	* Standard classes PN/PC for ball guides P6 for roller guides						
45	38	45	52,5	10,9							
55	43,5	53	60	14,6							
65	55	63	75	22,0							

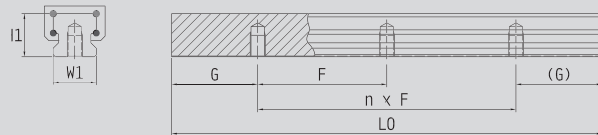


# SKF

### BALL GUIDES



**LLTHR four-row, mounting from above**  
Standard sizes 15-45



**LLTHR...D4 four-row, mounting from below**  
Standard sizes 15-45

LLTHR four-row					LLTHR...D4 four-row				
Sizes	Dimensions in mm			Weight	Sizes	Dimensions in mm			Weight
	H1	W1	F	kg/m		H1	W1	F	kg/m
15	14	15	60	1,4	15	14	15	60	1,4
20	18	20	60	2,3	20	18	20	60	2,4
25	22	23	60	3,3	25	22	23	60	3,4
30	26	28	80	4,8	30	26	28	80	5,0
35	29	34	80	6,6	35	29	34	80	6,8
45	38	45	105	11,3	45	38	45	105	11,8

Accuracy Classes		SKF Guide Carriages			Preload Classes		
<b>Ball Guides</b>		<b>Kriterium</b>	<b>Description</b>	<b>Code</b>	<b>Guide Carriages</b>		
P5	Standard	<b>Width</b>	Flanged	A	<b>T0</b>	Without up to light	
P3	Middle		Compact	U		<b>T1</b>	Middle
P1	High		Standard	-			<b>T2</b>
		<b>Length</b>	Standard	-			
			Long	L			
			Short	S			
		<b>Height</b>	Standard	-			
			High	R			