



# Linear ball bearings KN..-B

## closed design, with relubrication facility, adjustable angle

The datasheet is only an overview of dimensions and basic load ratings for the selected series. Please ensure that you note all the guidance in these overview pages. Further information is given on many products under the menu item "Description". You can also obtain comprehensive information material via Catalogue selection (http://www.ina.de/content.ina.de/en/services/mediathek/library/library.jsp), by e-mail (kataloge@de.ina.com) or telephone +49 (91 32) 82 - 28 97.





	Fw	D	L
	mm	mm	mm
KN12-B	12	22	32
KN16-B	16	26	36
KN20-B	20	32	45
KN25-B	25	40	58
KN30-B	30	47	68
KN40-B	40	62	80
KN50-B	50	75	100

2009-10-07 13:14 1 SCHAEFFLER GROUP



Figure 1

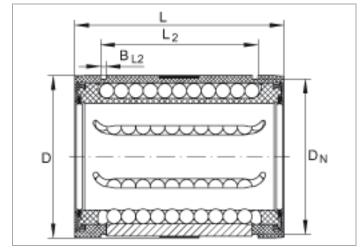
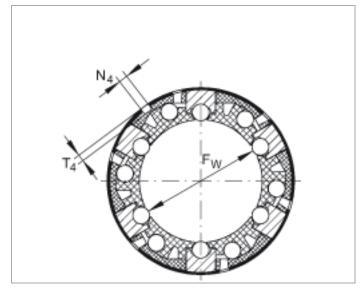


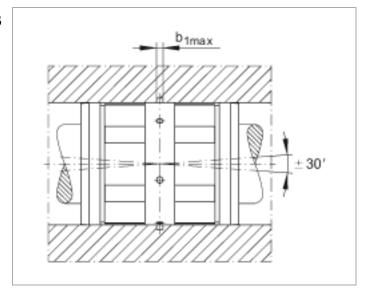
Figure 2



2009-10-07 13:14 2 SCHAEFFLER GROUP



Figure 3



2009-10-07 13:14 3 SCHAEFFLER GROUP



### KN12-B

Figure 1, Figure 2, Figure 3

Fw 12 mm D 22 mm L 32 mm	rigure i , i	-igure 2, Figure 3	,
L 32 mm  5 Number of rows of balls  1) Main load direction  b1 max 1,5 mm  BL2 1,3 mm  DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  Co min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  Co max 740 N Basic static load rating	Fw	12 mm	
5 Number of rows of balls  1) Main load direction  1,5 mm  BL2 1,3 mm  DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing	D	22 mm	
1) Main load direction  b1 max 1,5 mm  BL2 1,3 mm  DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing	L	32 mm	
1) Main load direction  b1 max 1,5 mm  BL2 1,3 mm  DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing			
b1 max		5	Number of rows of balls
BL2 1,3 mm  DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  C0 min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  C0 max 740 N Basic static load rating	1)		Main load direction
DN 21 mm  L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing	b1 max	1,5 mm	
L2 22,6 mm Tolerance: H13  N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing	BL2	1,3 mm	
N4 3 mm Hole position symmetrical to bearing length L  T4 0,7 mm  m 0,02 kg Mass of bearing	DN	21 mm	
m 0,02 kg Mass of bearing The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  Co min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  Co max 740 N Basic static load rating	L2	22,6 mm	Tolerance: H13
m 0,02 kg Mass of bearing The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  C0 min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  C0 max 740 N Basic static load rating	N4	3 mm	Hole position symmetrical to bearing length L
The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  C0 min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  C0 max 740 N Basic static load rating	T4	0,7 mm	
The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.  Cmin 730 N Basic dynamic load rating  C0 min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  C0 max 740 N Basic static load rating			
Cmin 730 N Basic dynamic load rating C0 min 510 N Basic static load rating Cmax 870 N Basic dynamic load rating C0 max 740 N Basic static load rating	m	0,02 kg	Mass of bearing
Co min 510 N Basic static load rating  Cmax 870 N Basic dynamic load rating  Co max 740 N Basic static load rating			The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
C <sub>max</sub> 870 N Basic dynamic load rating C <sub>0 max</sub> 740 N Basic static load rating	Cmin	730 N	Basic dynamic load rating
C0 max 740 N Basic static load rating	C0 min	510 N	Basic static load rating
· ·	Cmax	870 N	Basic dynamic load rating
22X1,2 Suitable retaining ring to DIN 471.	C0 max	740 N	Basic static load rating
		22X1,2	Suitable retaining ring to DIN 471.
Not included in delivery, must be ordered separately.			Not included in delivery, must be ordered separately.

2009-10-07 13:14 4 SCHAEFFLER GROUP



### KN16-B

Figure 1, Figure 2, Figure 3

C0 max	910 N 26X1,2	Basic static load rating Suitable retaining ring to DIN 471.
C <sub>0</sub> min	620 N 1040 N	Basic static load rating  Basic dynamic load rating
Cmin	870 N	Basic dynamic load rating
m	0,03 kg	Mass of bearing  The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
T4	0,7 mm	
N4	3 mm	Hole position symmetrical to bearing width L
L2	24,6 mm	Tolerance: H13
DN	25 mm	
BL2	1,3 mm	
b1 max	1,5 mm	
1)		Main load direction
	5	Number of rows of balls
L	36 mm	
D	26 mm	
Fw	16 mm	

2009-10-07 13:14 5 SCHAEFFLER GROUP



### KN20-B

Figure 1, Figure 2, Figure 3

	igure 2, Figure 3	
Fw	20 mm	
D	32 mm	
L	45 mm	
	6	Number of rows of balls
1)		Main load direction
b1 max	2,5 mm	
BL2	1,6 mm	
DN	30,7 mm	
L2	31,2 mm	Tolerance: H13
N4	3 mm	Hole position symmetrical to bearing width L
T4	0,9 mm	
m	0,06 kg	Mass of bearing
		The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
Cmin	1730 N	Basic dynamic load rating
C0 min	1230 N	Basic static load rating
Cmax	1830 N	Basic dynamic load rating
C <sub>0</sub> max	1570 N	Basic static load rating
	32X1,5	Suitable retaining ring to DIN 471.
		Not included in delivery, must be ordered separately.

2009-10-07 13:14 6 SCHAEFFLER GROUP



### KN25-B

Figure 1, Figure 2, Figure 3

	42X1,75	Suitable retaining ring to DIN 471.  Not included in delivery, must be ordered separately.
C <sub>0</sub> max	2850 N	Basic static load rating
Cmax	3250 N	Basic dynamic load rating
C0 min	2220 N	Basic static load rating
Cmin	3100 N	Basic dynamic load rating
		The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
m	0,13 kg	Mass of bearing
T4	1,4 mm	
N4	3 mm	Hole position symmetrical to bearing width L
L2	43,7 mm	Tolerance: H13
Dn	38,5 mm	
BL2	1,85 mm	
b1 max	2,5 mm	
1)		Main load direction
	6	Number of rows of balls
L	58 mm	
D	40 mm	
Fw	25 mm	

2009-10-07 13:14 7 SCHAEFFLER GROUP



### KN30-B

Figure 1, Figure 2, Figure 3

	igure 2, Figure 3	,
Fw	30 mm	
D	47 mm	
L	68 mm	
	6	Number of rows of balls
1)		Main load direction
b1 max	2,5 mm	
BL2	1,85 mm	
DN	44,7 mm	
L2	51,7 mm	Tolerance: H13
N4	3 mm	Hole position symmetrical to bearing width L
T4	2,2 mm	
m	0,19 kg	Mass of bearing
		The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
Cmin	3750 N	Basic dynamic load rating
C0 min	2850 N	Basic static load rating
Cmax	3950 N	Basic dynamic load rating
C <sub>0</sub> max	3650 N	Basic static load rating
	48X1,75	Suitable retaining ring to DIN 471.
		Not included in delivery, must be ordered separately.

2009-10-07 13:14 8 SCHAEFFLER GROUP



### KN40-B

Figure 1, Figure 2, Figure 3

	igure 2, Figure 3	
Fw	40 mm	
D	62 mm	
L	80 mm	
	6	Number of rows of balls
1)		Main load direction
b1 max	3 mm	
BL2	2,15 mm	
DN	59,4 mm	
L2	60,3 mm	Tolerance: H13
N4	3 mm	Hole position symmetrical to bearing width L
T4	2,2 mm	
m	0,35 kg	Mass of bearing
		The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
Cmin	6300 N	Basic dynamic load rating
C0 min	4350 N	Basic static load rating
Cmax	6700 N	Basic dynamic load rating
C <sub>0</sub> max	5600 N	Basic static load rating
	63X2	Suitable retaining ring to DIN 471.
		Not included in delivery, must be ordered separately.

2009-10-07 13:14 9 SCHAEFFLER GROUP



### KN50-B

Figure 1, Figure 2, Figure 3

	igure 2, Figure 3	
Fw	50 mm	
D	75 mm	
L	100 mm	
	6	Number of rows of balls
1)		Main load direction
b1 max	3 mm	
BL2	2,65 mm	
DN	71,4 mm	
L2	77,3 mm	Tolerance: H13
N4	5 mm	Hole position symmetrical to bearing width L
T4	2,3 mm	
m	0,67 kg	Mass of bearing
		The basic load ratings are only valid for hardened (670+170 HV) and ground shaft raceways.
Cmin	9300 N	Basic dynamic load rating
C0 min	6500 N	Basic static load rating
Cmax	9800 N	Basic dynamic load rating
C <sub>0</sub> max	8300 N	Basic static load rating
	75X2,5	Suitable retaining ring to DIN 471.
		Not included in delivery, must be ordered separately.

2009-10-07 13:14 10 SCHAEFFLER GROUP