



Linear ball bearings

Linear ball bearing and housing units

Light range

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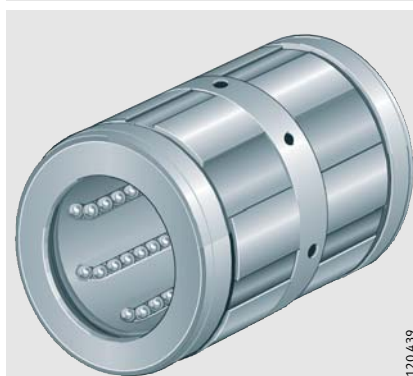
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Product overview – Linear ball bearings

Linear ball bearings

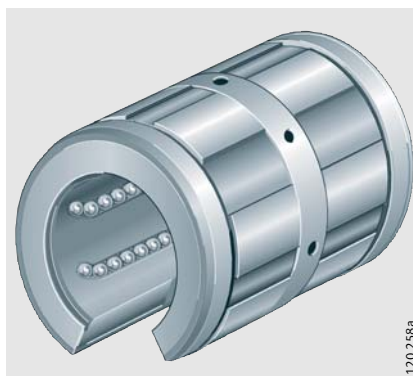
Closed design

KN..-B-PP



Open design

KNO..-B-PP



Linear ball bearings

Features

Linear ball bearings KN and KNO comprise a high strength plastic cage with steel load plates, balls, shields and seals. The cage guides the balls. An external steel retaining ring supports the load plates.

The bearings can support high loads while having a relatively low mass and allow the construction of linear guidance systems with unlimited travel.

Open or closed design

Linear ball bearings are available in open and closed variants, see page 4.

The open design KNO has a segment cut out and is intended for supported shafts.

Compensation of misalignment

Misalignment can be caused by tolerance defects, inaccuracies or mounting defects in the adjacent construction. INA linear ball bearings compensate static misalignments up to $\pm 30'$ without impairing the load carrying capacity and operating life of the bearings, Figure 1.

Due to the self-alignment function, the balls run without difficulty into the load zone. At the same time, the load distribution over the whole ball row is more uniform. This leads to smoother running, allows higher accelerations and prevents overloading of the individual balls.

Overall, this means that the bearings can achieve higher loads and a longer operating life; if necessary, the adjacent construction can be designed to be smaller and more economical.

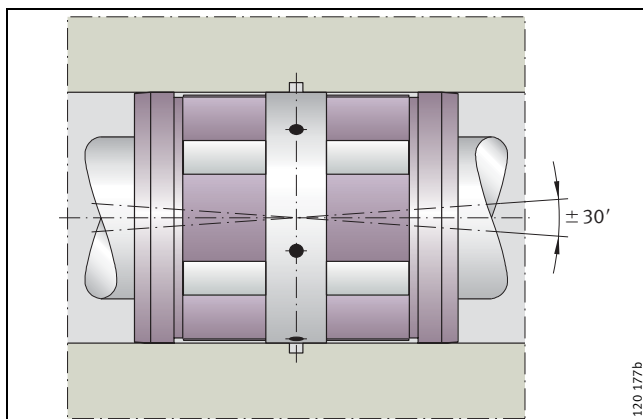


Figure 1 • Compensation of misalignment

Caution!

In order to fully utilise the basic load ratings given in the dimension table, the shaft raceway must be hardened (670 HV + 170 HV) and ground.

When designing the bearing arrangement, the data in INA Catalogue "801" must be taken into consideration.

Sealing/lubrication

Highly effective double lip polyester elastomer sealing rings on both sides prevent the ingress of contamination into the bearing and retain the grease in the ball bearing.

In order to achieve all-round sealing, the open bearings are available by agreement with additional sealing strips.

Due to the initial greasing with a high quality grease and the integral lubricant reservoir, the linear ball bearings are maintenance-free for many applications; if necessary, however, they can be relubricated.

Caution!

In order to distribute the grease uniformly, the bearing must be moved during relubrication.

Operating temperature

The bearings can be used at operating temperatures up to +80 °C.

Linear ball bearing and housing units

Linear ball bearings are also available in conjunction with INA housings as complete bearing units. Linear ball bearing and housing units: see page 10.

Complete linear solutions

If linear ball bearings are combined not only with INA housings but also with INA shafts, this gives optimally matched, ready-to-fit, cost-effective complete solutions with a long operating life.

Linear ball bearings

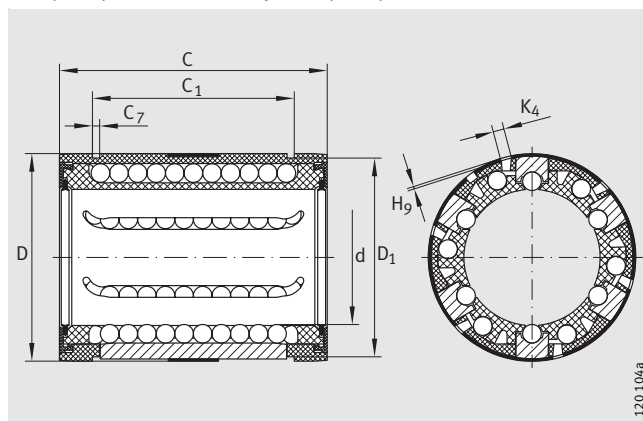
Light range

Series KN...B-PP

Closed design

Series KNO...B-PP

Open design



KN...B-PP

Dimension table · Dimensions in mm

Shaft diameter	Designation		Mass	Dimensions			Mounting dimensions			
				d	D	C	A ₆ ¹⁾	C ₁	C ₇	D ₁
d	Closed design	Open design	≈kg					H13		
12	KN12-B-PP	–	0,02	12	22	32	–	22,6	1,3	21
	–	KNO12-B-PP	0,02	12	22	32	6,5	–	–	–
16	KN16-B-PP	–	0,03	16	26	36	–	24,6	1,3	25
	–	KNO16-B-PP	0,02	16	26	36	9	–	–	–
20	KN20-B-PP	–	0,06	20	32	45	–	31,2	1,6	30,7
	–	KNO20-B-PP	0,05	20	32	45	9	–	–	–
25	KN25-B-PP	–	0,13	25	40	58	–	43,7	1,85	38,5
	–	KNO25-B-PP	0,11	25	40	58	11,5	–	–	–
30	KN30-B-PP	–	0,19	30	47	68	–	51,7	1,85	44,7
	–	KNO30-B-PP	0,16	30	47	68	14	–	–	–
40	KN40-B-PP	–	0,35	40	62	80	–	60,3	2,15	59,4
	–	KNO40-B-PP	0,3	40	62	80	19	–	–	–
50	KN50-B-PP	–	0,67	50	75	100	–	77,3	2,65	71,4
	–	KNO50-B-PP	0,57	50	75	100	22,5	–	–	–

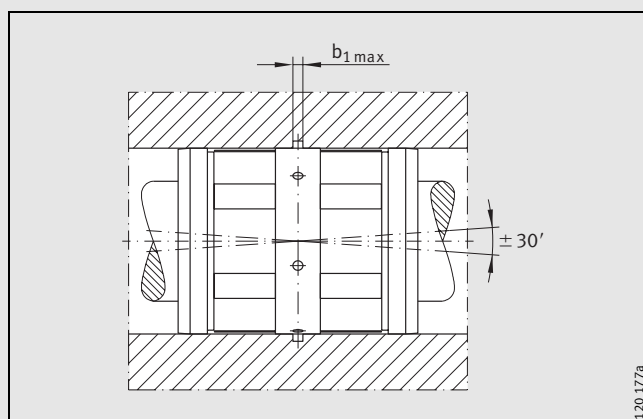
1) Dimension A₆ on diameter d.

2) Hole position symmetrical with bearing width C.

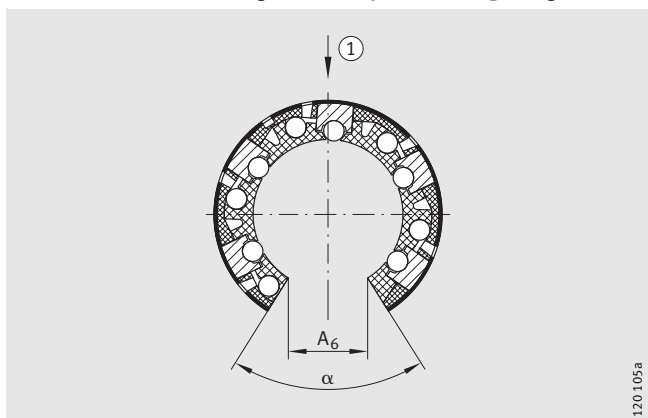
3) The basic load ratings are valid only for hardened (670 HV + 170 HV) and ground shaft raceways.

4) Basic load rating in main load direction.

5) Not included in the delivery. Supplied via trade distributors.



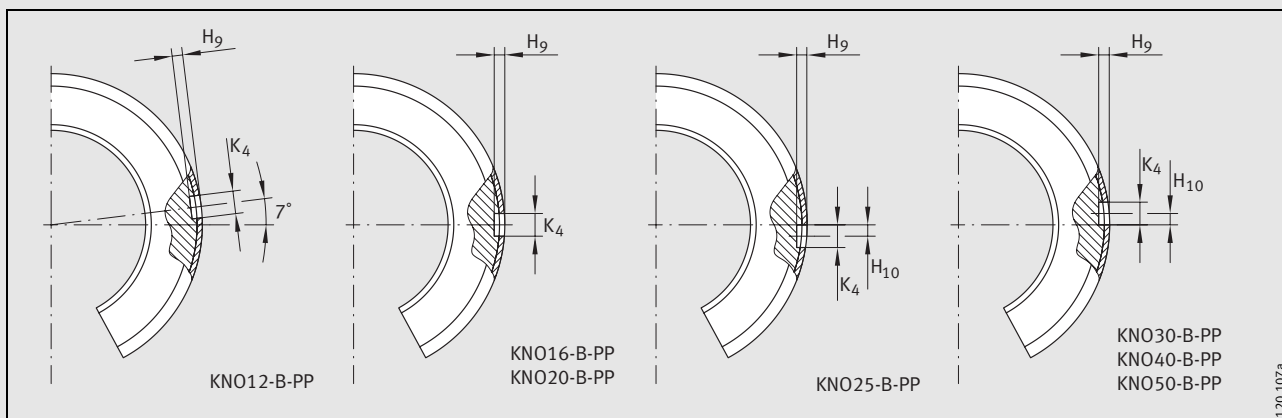
Compensation of misalignments ±30'



KNO...-B-PP

① Main load direction

H ₉	H ₁₀	K ₄ ²⁾	α	b _{1 max}	Ball rows Number	Basic load ratings ³⁾				Suitable retaining ring to DIN 471 ⁵⁾	Shaft diameter d
						dyn. C _{min} N	stat. C _{0 min} N	dyn. C _{max} N	stat. C _{0 max} N		
0,7	–	3	–	1,5	5	730	510	870	740	22×1,2	12
0,7	–	3	66	1,5	4	–	–	840 ⁴⁾	640 ⁴⁾	–	
0,7	–	3	–	1,5	5	870	620	1 040	910	26×1,2	16
0,7	–	3	68	1,5	4	–	–	1 000 ⁴⁾	750 ⁴⁾	–	
0,9	–	3	–	2,5	6	1 730	1 230	1 830	1 570	32×1,5	20
0,9	–	3	55	2,5	5	–	–	1 740 ⁴⁾	1 240 ⁴⁾	–	
1,4	–	3	–	2,5	6	3 100	2 220	3 250	2 850	42×1,75	25
1,4	1,5	3	57	2,5	5	–	–	3 100 ⁴⁾	2 260 ⁴⁾	–	
2,2	–	3	–	2,5	6	3 750	2 850	3 950	3 650	48×1,75	30
2,2	2	3	57	2,5	5	–	–	3 750 ⁴⁾	2 850 ⁴⁾	–	
2,2	–	3	–	3	6	6 300	4 350	6 700	5 600	63×2	40
2,2	1,5	3	56	3	5	–	–	6 300 ⁴⁾	4 350 ⁴⁾	–	
2,3	–	5	–	3	6	9 300	6 500	9 800	8 300	75×2,5	50
2,3	2,5	5	54	3	5	–	–	9 300 ⁴⁾	6 500 ⁴⁾	–	



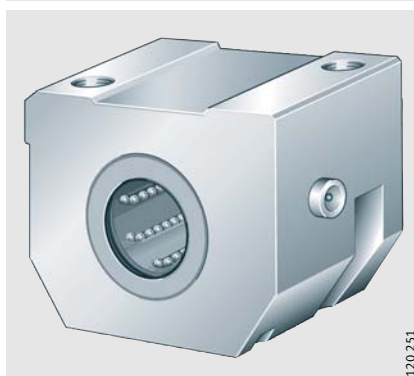
Fixing holes

Product overview – Linear ball bearing and housing units

Closed units

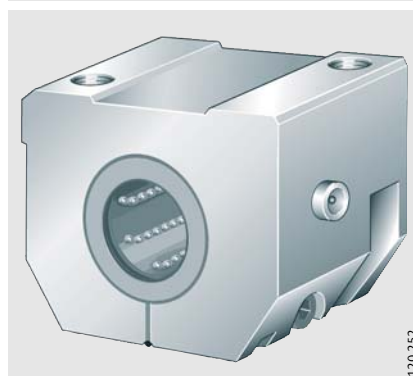
Housing with or without slot

KGN...-C-PP-AS



120 251

KGNS...-C-PP-AS



120 252

Bearings mounted in tandem arrangement

Housing with or without slot

KTN...-C-PP-AS



120 253

KTNS...-C-PP-AS



120 254

Open units

Housing with or without slot

KGNC...-C-PP-AS



120 264

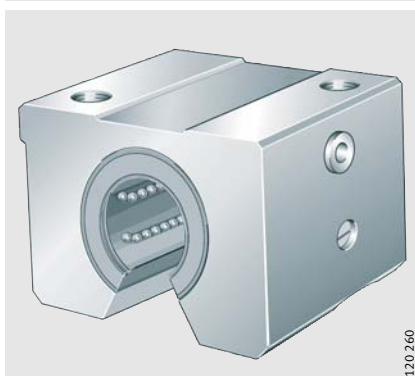
KGNC...-C-PP-AS



120 265

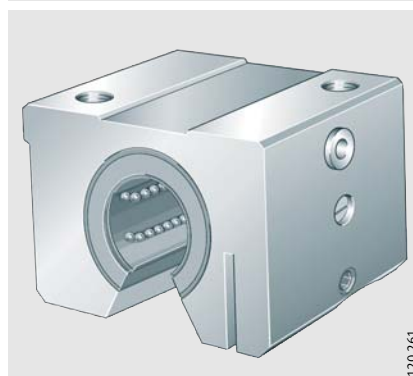
Housing with or without slot

KGNO..-C-PP-AS



120 260

KGNOs..-C-PP-AS

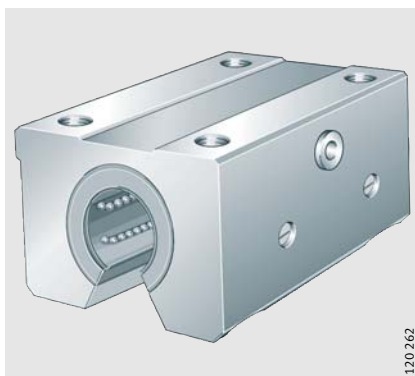


120 261

Bearings mounted in tandem arrangement

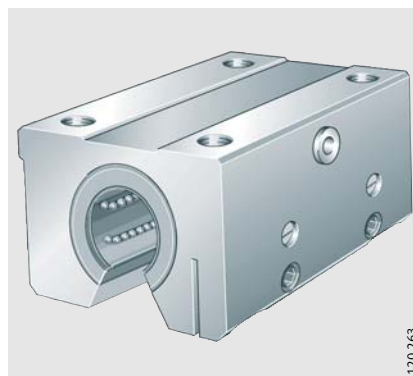
Housing with or without slot

KTNO..-C-PP-AS



120 262

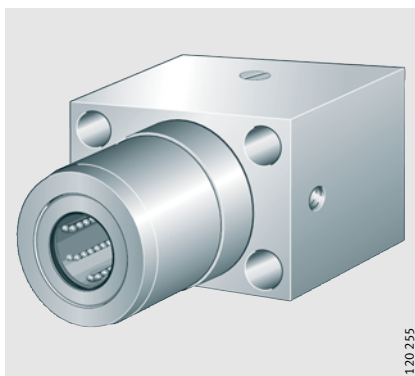
KTNOs..-C-PP-AS



120 263

Closed unit with centring collar

KTFN..-C-PP-AS



120 255

Linear ball bearing and housing units

Features

Linear ball bearings KN and KNO are also available in conjunction with INA housings as complete bearing units. The linear bearings are located in the housing by means of a radial fixing screw to prevent axial displacement.

The housings are made from a high rigidity, high strength aluminium alloy that allows the full load carrying capacity of the bearings fitted to be utilised. Due to the comparatively low total mass, the units are particularly suitable for reduced mass designs with high loads and where higher accelerations and travel speeds are required.

Threaded and counterbored holes in the housing allow straightforward screw mounting on the adjacent construction, if necessary from below. For rapid alignment, the housings have a locating edge. This also prevents distortion of the linear bearings when the housings are being mounted. Centring holes allow rapid additional location by dowels on the adjacent construction.

Housing designs

The housings are available as closed, open and slotted designs and as a tandem series fitted with two linear ball bearings, see page 8 and page 9.

Closed design

In this variant, the bearing and housing are closed. High precision standard guidance systems with a fixed enveloping circle can thus be easily achieved.

Open design

Open designs are used where, in the case of long guidance systems, the shaft must be supported and the bearing arrangement must be highly rigid.

Slotted design

Open and closed designs are also available with a slot. Slotted variants are suitable for clearance-free or preloaded guidance systems. The radial internal clearance is set by means of an adjusting screw.

Tandem design

Tandem ball bearing and housing units are available in open and closed designs. Both variants are also available in the named design with a slot.

For special applications, there is also a tandem version with a centring collar for locating bores to H7.

Linear ball bearings

The linear ball bearings KN and KNO fitted can support high loads and compensate static misalignments of the bearing centre axis up to $\pm 30'$ without impairing the load carrying capacity and operating life of the bearings. Comprehensive description of the linear ball bearings: see page 5.

Caution!

In order to fully utilise the basic load ratings of the bearings given in the dimension tables, the shaft raceway must be hardened (670 HV + 170 HV) and ground.

When designing the bearing arrangement, the data in INA Catalogue "801" must be taken into consideration.

Sealing/lubrication

Double lip polyester elastomer sealing rings on both sides prevent the ingress of contamination into the bearing and retain the grease in the ball bearing.

Due to the initial greasing, the units are maintenance-free for many applications; if necessary, however, they can be relubricated.

Lubrication is carried out via a separate lubrication nipple in the housing; location of the bearing in the housing and the relubrication devices are separate from each other.

Caution!

In order to distribute the grease uniformly, the bearing must be moved during relubrication.

Operating temperature

The units can be used at operating temperatures up to +80 °C.

Complete linear solutions

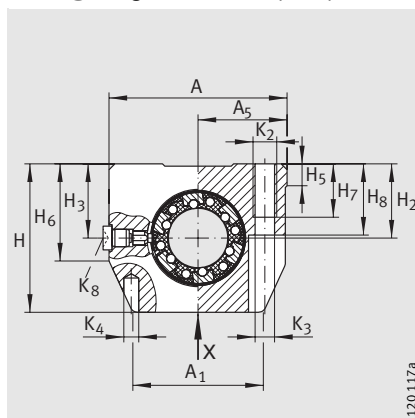
If linear ball bearings are combined with INA housings and INA shafts, this gives optimally matched, ready-to-fit, cost-effective complete solutions with a long operating life.

Linear ball bearing and housing units

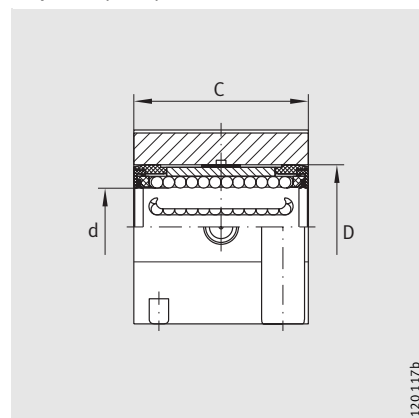
Closed design
With or without slot

Series KGN...-C-PP-AS
KGNS...-C-PP-AS

Series KTN...-C-PP-AS
KTNS...-C-PP-AS
Tandem arrangement



KGN(S)...-C-PP-AS
KTN(S)...-C-PP-AS



KGN...-C-PP-AS

Dimension table · Dimensions in mm

Shaft diameter d	Designation		Mass ≈kg	Dimensions				Mounting dimensions				
	Single arrangement	Tandem arrangement		d	A	C	H	A ₁	A ₅	C ₂ ¹⁾	C ₃ ¹⁾	D
12	KGN12-C-PP-AS	–	0,1	12	43	32	35	32±0,15	21,5	23±0,15	–	22
	KGNS12-C-PP-AS	–	0,1	12	43	32	35	32±0,15	21,5	23±0,15	–	22
	–	KTN12-C-PP-AS	0,21	12	43	70	35	32±0,15	21,5	56±0,15	24	22
	–	KTNS12-C-PP-AS	0,21	12	43	70	35	32±0,15	21,5	56±0,15	24	22
16	KGN16-C-PP-AS	–	0,17	16	53	37	42	40±0,15	26,5	26±0,15	–	26
	KGNS16-C-PP-AS	–	0,17	16	53	37	42	40±0,15	26,5	26±0,15	–	26
	–	KTN16-C-PP-AS	0,35	16	53	78	42	40±0,15	26,5	64±0,15	26	26
	–	KTNS16-C-PP-AS	0,35	16	53	78	42	40±0,15	26,5	64±0,15	26	26
20	KGN20-C-PP-AS	–	0,27	20	60	45	50	45±0,15	30	32±0,15	–	32
	KGNS20-C-PP-AS	–	0,27	20	60	45	50	45±0,15	30	32±0,15	–	32
	–	KTN20-C-PP-AS	0,56	20	60	96	50	45±0,15	30	76±0,15	33	32
	–	KTNS20-C-PP-AS	0,56	20	60	96	50	45±0,15	30	76±0,15	33	32
25	KGN25-C-PP-AS	–	0,56	25	78	58	60	60±0,15	39	40±0,15	–	40
	KGNS25-C-PP-AS	–	0,56	25	78	58	60	60±0,15	39	40±0,15	–	40
	–	KTN25-C-PP-AS	1,15	25	78	122	60	60±0,15	39	94±0,2	44	40
	–	KTNS25-C-PP-AS	1,15	25	78	122	60	60±0,15	39	94±0,2	44	40
30	KGN30-C-PP-AS	–	0,83	30	87	68	70	68±0,15	43,5	45±0,15	–	47
	KGNS30-C-PP-AS	–	0,83	30	87	68	70	68±0,15	43,5	45±0,15	–	47
	–	KTN30-C-PP-AS	1,7	30	87	142	70	68±0,15	43,5	106±0,2	54	47
	–	KTNS30-C-PP-AS	1,7	30	87	142	70	68±0,15	43,5	106±0,2	54	47
40	KGN40-C-PP-AS	–	1,55	40	108	80	90	86±0,15	54	58±0,15	–	62
	KGNS40-C-PP-AS	–	1,55	40	108	80	90	86±0,15	54	58±0,15	–	62
50	KGN50-C-PP-AS	–	2,7	50	132	100	105	108±0,2	66	50±0,2	–	75
	KGNS50-C-PP-AS	–	2,7	50	132	100	105	108±0,2	66	50±0,2	–	75

¹⁾ Dimensions C₂, C₃ and lubrication hole symmetrical to bearing width C.

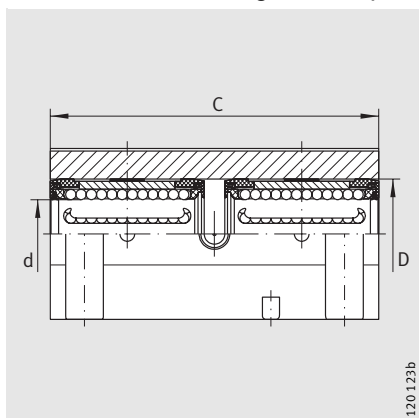
²⁾ For fixing screws to EN ISO 4 762-8.8.

Screws should be secured, especially if a loss of preload may occur.

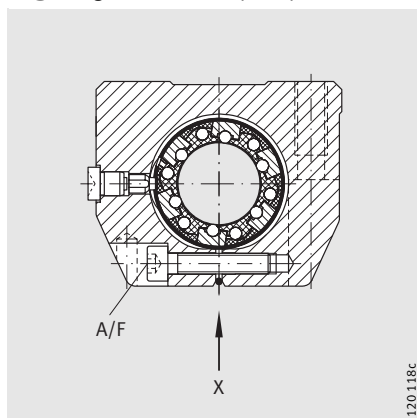
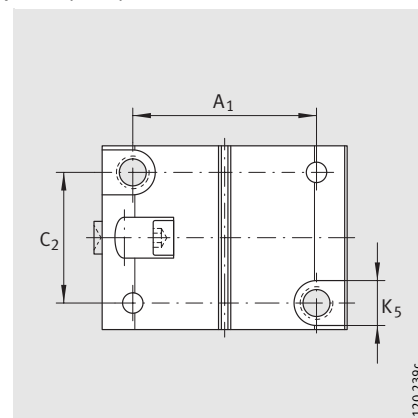
³⁾ Centring for dowel hole.

⁴⁾ Lubrication nipple.

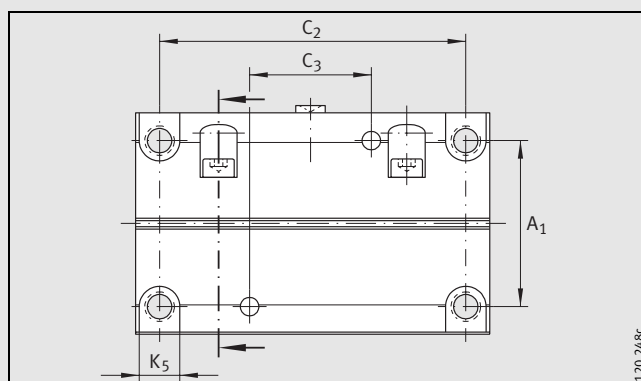
⁵⁾ The basic load ratings are valid only for hardened (670 HV + 170 HV) and ground shaft raceways.



KTN...-C-PP-AS


KGN(S)...-C-PP-AS
KTN(S)...-C-PP-AS

KGNS...-C-PP-AS
View X (rotated 90°)

												Ball rows Number	Basic load ratings ⁵⁾		Shaft diameter d
H ₂ +0,008 -0,016	H ₃	H ₅	H ₆	H ₇	H ₈	K ₂	K ₃ ²⁾	K ₄ ³⁾	K ₅ ²⁾	K ₈ ¹⁾⁴⁾	A/F		dyn. C N	stat. C ₀ N	
18	18	6	25,5	11	16,5	M5	4,3	4	8	NIP A1	—	5	780	560	12
18	18	6	25,5	11	16,5	M5	4,3	4	8	NIP A1	2,5	5	780	560	
18	18	6	25,5	11	16,5	M5	4,3	4	8	NIP A1	—	5	1 270	1 110	
18	18	6	25,5	11	16,5	M5	4,3	4	8	NIP A1	2,5	5	1 270	1 110	
22	22	7	28	13	21	M6	5,3	4	10	NIP A1	—	5	1 000	750	16
22	22	7	28	13	21	M6	5,3	4	10	NIP A1	3	5	1 000	750	
22	22	7	28	13	21	M6	5,3	4	10	NIP A1	—	5	1 620	1 500	
22	22	7	28	13	21	M6	5,3	4	10	NIP A1	3	5	1 620	1 500	
25	25	7,5	33	18	24	M8	6,6	5	11	NIP A1	—	6	1 740	1 240	20
25	25	7,5	33	18	24	M8	6,6	5	11	NIP A1	4	6	1 740	1 240	
25	25	7,5	33	18	24	M8	6,6	5	11	NIP A1	—	6	2 850	2 480	
25	25	7,5	33	18	24	M8	6,6	5	11	NIP A1	4	6	2 850	2 480	
30	30	8,5	40	22	29	M10	8,4	6	15	NIP A2	—	6	3 100	2 230	25
30	30	8,5	40	22	29	M10	8,4	6	15	NIP A2	5	6	3 100	2 230	
30	30	8,5	40	22	29	M10	8,4	6	15	NIP A2	—	6	5 000	4 450	
30	30	8,5	40	22	29	M10	8,4	6	15	NIP A2	5	6	5 000	4 450	
35	35	9,5	44,5	22	34	M10	8,4	6	15	NIP A2	—	6	3 800	2 900	30
35	35	9,5	44,5	22	34	M10	8,4	6	15	NIP A2	5	6	3 800	2 900	
35	35	9,5	44,5	22	34	M10	8,4	6	15	NIP A2	—	6	6 100	5 800	
35	35	9,5	44,5	22	34	M10	8,4	6	15	NIP A2	5	6	6 100	5 800	
45	45	11	56	26	44	M12	10,5	8	18	NIP A2	—	6	6 300	4 350	40
45	45	11	56	26	44	M12	10,5	8	18	NIP A2	6	6	6 300	4 350	
50	50	11	60	35	49	M16	13,5	10	20	NIP A2	—	6	9 300	6 500	50
50	50	11	60	35	49	M16	13,5	10	20	NIP A2	8	6	9 300	6 500	



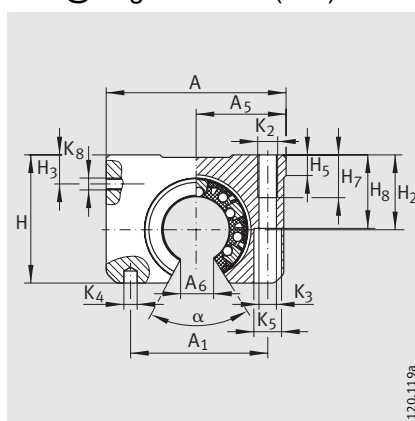
KTNS...-C-PP-AS – view X (rotated 90°)

Linear ball bearing and housing units

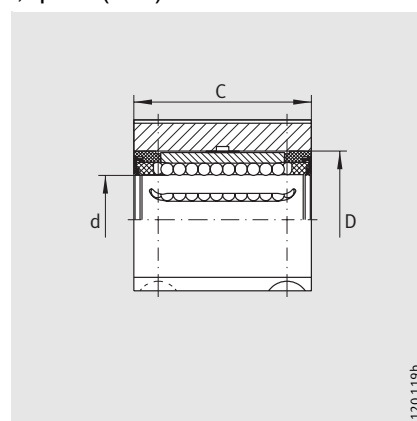
Open design
With or without slot

Series KGNO...-C-PP-AS
KGNOS...-C-PP-AS

Series KTNO...-C-PP-AS
KTNOS...-C-PP-AS
Tandem arrangement



KGNO(S)...-C-PP-AS
KTNO(S)...-C-PP-AS



KGNO...-C-PP-AS

Dimension table · Dimensions in mm

Shaft diameter d	Designation		Mass ≈kg	Dimensions				Mounting dimensions					
	Single arrangement	Tandem arrangement		d	A	C	H	A ₁	A ₅	A ₆ ¹⁾	C ₂ ²⁾	C ₃ ²⁾	D
12	KGNO12-C-PP-AS	–	0,09	12	43	32	28	32±0,15	21,5	6,5	23±0,15	–	22
	KGNOS12-C-PP-AS	–	0,09	12	43	32	28	32±0,15	21,5	6,5	23±0,15	–	22
	–	KTNO12-C-PP-AS	0,19	12	43	70	28	32±0,15	21,5	6,5	56±0,15	24	22
	–	KTNOS12-C-PP-AS	0,19	12	43	70	28	32±0,15	21,5	6,5	56±0,15	24	22
16	KGNO16-C-PP-AS	–	0,15	16	53	37	35	40±0,15	26,5	9	26±0,15	–	26
	KGNOS16-C-PP-AS	–	0,15	16	53	37	35	40±0,15	26,5	9	26±0,15	–	26
	–	KTNO16-C-PP-AS	0,31	16	53	78	35	40±0,15	26,5	9	64±0,15	26	26
	–	KTNOS16-C-PP-AS	0,31	16	53	78	35	40±0,15	26,5	9	64±0,15	26	26
20	KGNO20-C-PP-AS	–	0,25	20	60	45	42	45±0,15	30	9	32±0,15	–	32
	KGNOS20-C-PP-AS	–	0,25	20	60	45	42	45±0,15	30	9	32±0,15	–	32
	–	KTNO20-C-PP-AS	0,52	20	60	96	42	45±0,15	30	9	76±0,15	33	32
	–	KTNOS20-C-PP-AS	0,52	20	60	96	42	45±0,15	30	9	76±0,15	33	32
25	KGNO25-C-PP-AS	–	0,52	25	78	58	51	60±0,15	39	11,5	40±0,15	–	40
	KGNOS25-C-PP-AS	–	0,52	25	78	58	51	60±0,15	39	11,5	40±0,15	–	40
	–	KTNO25-C-PP-AS	1,06	25	78	122	51	60±0,15	39	11,5	94±0,2	44	40
	–	KTNOS25-C-PP-AS	1,06	25	78	122	51	60±0,15	39	11,5	94±0,2	44	40
30	KGNO30-C-PP-AS	–	0,76	30	87	68	60	68±0,15	43,5	14	45±0,15	–	47
	KGNOS30-C-PP-AS	–	0,76	30	87	68	60	68±0,15	43,5	14	45±0,15	–	47
	–	KTNO30-C-PP-AS	1,23	30	87	142	60	68±0,15	43,5	14	106±0,2	54	47
	–	KTNOS30-C-PP-AS	1,23	30	87	142	60	68±0,15	43,5	14	106±0,2	54	47
40	KGNO40-C-PP-AS	–	1,4	40	108	80	77	86±0,15	54	19	58±0,15	–	62
	KGNOS40-C-PP-AS	–	1,4	40	108	80	77	86±0,15	54	19	58±0,15	–	62
50	KGNO50-C-PP-AS	–	2,4	50	132	100	88	108±0,2	66	22,5	50±0,2	–	75
	KGNOS50-C-PP-AS	–	2,4	50	132	100	88	108±0,2	66	22,5	50±0,2	–	75

1) Dimension A₆ on diameter d.

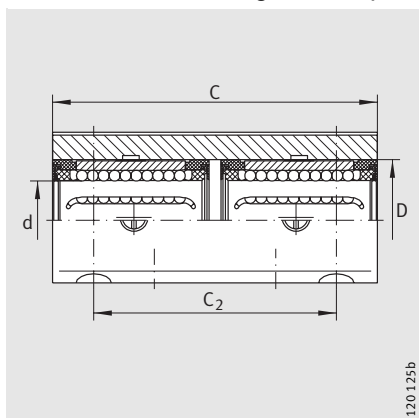
2) Dimensions C₂, C₃ and lubrication hole symmetrical to bearing width C.

3) For fixing screws to EN ISO 4 762-8.8.

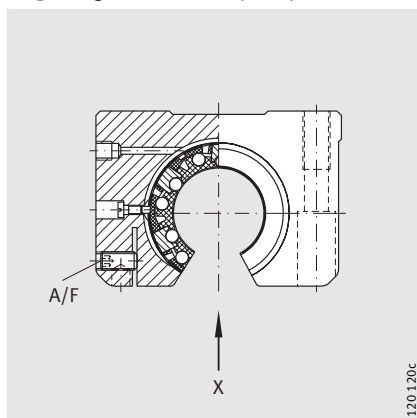
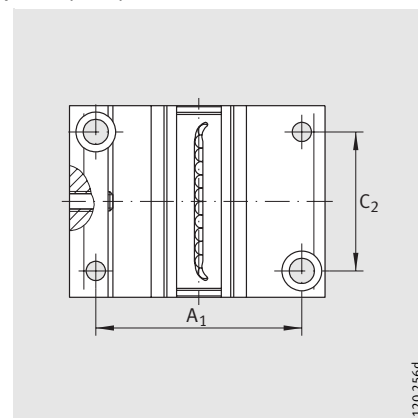
Screws should be secured, especially if a loss of preload may occur.

4) Centring for dowel hole.

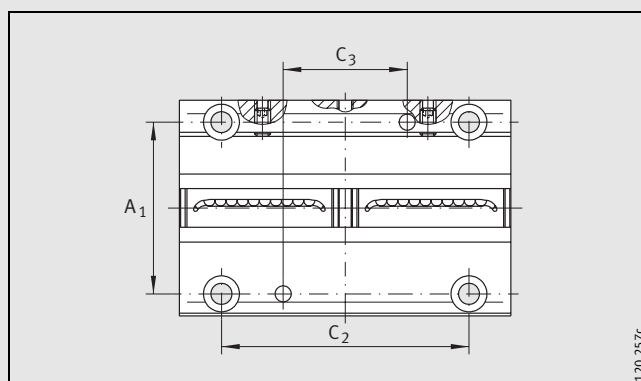
5) The basic load ratings are valid only for hardened (670 HV + 170 HV) and ground shaft raceways.



KTNO...-C-PP-AS


KGNO(S)...-C-PP-AS
KTNO(S)...-C-PP-AS

KGNOS...-C-PP-AS
View X (rotated 90°)

H ₂ +0,008 -0,016	H ₃	H ₅	H ₇	H ₈	K ₂	K ₃ ³⁾	K ₄ ⁴⁾	K ₅ ²⁾	K ₈ ²⁾	A/F	α Degrees	Ball rows Number	Basic load ratings ⁵⁾		Shaft diameter d
													dyn. C N	stat. C ₀ N	
18	8	6	11	16,5	M5	4,3	4	8	M6	–	66	4	840	640	12
18	8	6	11	16,5	M5	4,3	4	8	M6	2,5	66	4	840	640	
18	8	6	11	16,5	M5	4,3	4	8	M6		66	4	1 370	1 270	
18	8	6	11	16,5	M5	4,3	4	8	M6	2,5	66	4	1 370	1 270	
22	10	7,5	13	21	M6	5,3	4	10	M6	–	68	4	1 000	750	16
22	10	7,5	13	21	M6	5,3	4	10	M6	2,5	68	4	1 000	750	
22	10	7,5	13	21	M6	5,3	4	10	M6		68	4	1 620	1 500	
22	10	7,5	13	21	M6	5,3	4	10	M6	2,5	68	4	1 620	1 500	
25	11	8	18	24	M8	6,6	5	11	M6	–	55	5	1 740	1 240	20
25	11	8	18	24	M8	6,6	5	11	M6	2,5	55	5	1 740	1 240	
25	11	8	18	24	M8	6,6	5	11	M6		55	5	2 850	2 480	
25	11	8	18	24	M8	6,6	5	11	M6	2,5	55	5	2 850	2 480	
30	12,5	9	22	29	M10	8,4	6	15	M8×1	–	57	5	3 100	2 260	25
30	12,5	9	22	29	M10	8,4	6	15	M8×1	3	57	5	3 100	2 260	
30	12,5	9	22	29	M10	8,4	6	15	M8×1		57	5	5 100	4 560	
30	12,5	9	22	29	M10	8,4	6	15	M8×1	3	57	5	5 100	4 560	
35	14	9,5	22	34	M10	8,4	6	15	M8×1	–	57	5	3 750	2 850	30
35	14	9,5	22	34	M10	8,4	6	15	M8×1	3	57	5	3 750	2 850	
35	14	9,5	22	34	M10	8,4	6	15	M8×1		57	5	6 100	5 700	
35	14	9,5	22	34	M10	8,4	6	15	M8×1	3	57	5	6 100	5 700	
45	17,5	12	26	44	M12	10,5	8	18	M8×1	–	56	5	6 300	4 350	40
45	17,5	12	26	44	M12	10,5	8	18	M8×1	4	56	5	6 300	4 350	
50	17,5	12	35	49	M16	13,5	10	20	M8×1	–	54	5	9 300	6 500	50
50	17,5	12	35	49	M16	13,5	10	20	M8×1	5	54	5	9 300	6 500	

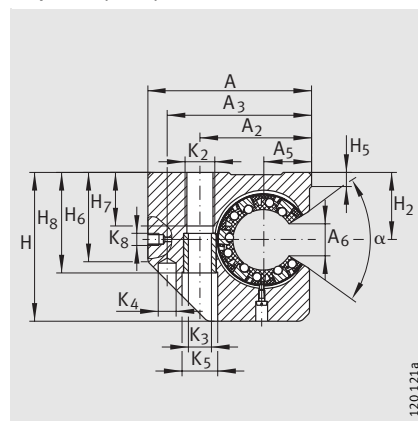


KTNOS...-C-PP-AS – view X (rotated 90°)

Linear ball bearing and housing units

Open design
With or without slot

Series KGNC...-C-PP-AS
KGNC...-C-PP-AS



KGNC...-C-PP-AS

Dimension table · Dimensions in mm

Shaft diameter d	Designation	Mass ≈ kg	Dimensions				Mounting dimensions							
			d	A	C	H	A ₂	A ₃	A ₅	A ₆ ¹⁾	C ₂ ²⁾	C ₃ ²⁾	D	H ₂
							±0,15		±0,01		±0,15			+0,008 -0,016
20	KGNC20-C-PP-AS	0,35	20	60	47	60	39	51	17	9	30	36	32	30
	KGNC20-C-PP-AS	0,35	20	60	47	60	39	51	17	9	30	36	32	30
25	KGNC25-C-PP-AS	0,68	25	75	58	72	49	64	21	11,5	36	45	40	35
	KGNC25-C-PP-AS	0,68	25	75	58	72	49	64	21	11,5	36	45	40	35
30	KGNC30-C-PP-AS	1	30	86	68	82	59	76	25	14	42	52	47	40
	KGNC30-C-PP-AS	1	30	86	68	82	59	76	25	14	42	52	47	40
40	KGNC40-C-PP-AS	1,8	40	110	80	100	75	97	32	19	48	60	62	45
	KGNC40-C-PP-AS	1,8	40	110	80	100	75	97	32	19	48	60	62	45
50	KGNC50-C-PP-AS	2,9	50	127	100	115	88	109	38	22,5	62	80	75	50
	KGNC50-C-PP-AS	2,9	50	127	100	115	88	109	38	22,5	62	80	75	50

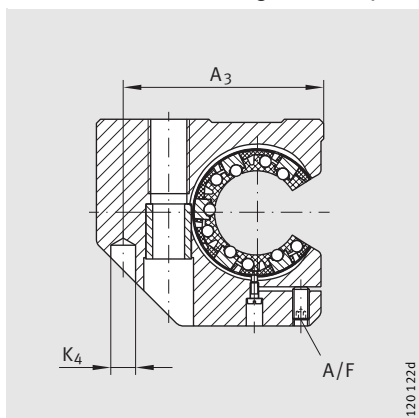
1) Dimension A₆ on diameter d.

2) Dimensions C₂, C₃ and lubrication hole symmetrical to bearing width C.

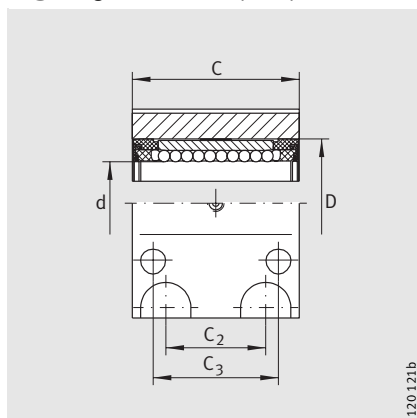
3) Centring for dowel hole.

4) For fixing screws to EN ISO 4 762-8.8.
Screws should be secured, especially if a loss of preload may occur.

5) The basic load ratings are valid only for hardened (670 HV + 170 HV) and ground shaft raceways.



KGNC...-C-PP-AS



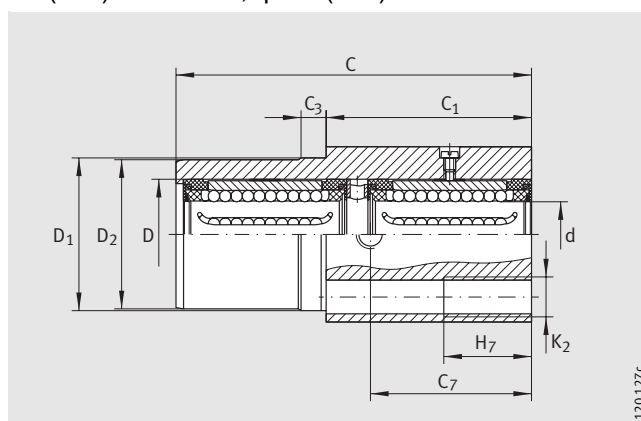
KGNC...-C-PP-AS
KGNC...-C-PP-AS

H ₅	H ₆	H ₇	H ₈	K ₂	K ₃ ³⁾	K ₄ ⁴⁾	K ₅ ³⁾	K ₈ ²⁾	A/F	α	Ball rows Number	Basic load ratings ⁵⁾		Shaft diameter d
												dyn. C N	stat. C ₀ N	
8	37,5	18	42	M10	8,4	6	15	M6	—	55	5	1 740	1 240	20
8	37,5	18	42	M10	8,4	6	15	M6	2,5	55	5	1 740	1 240	
8	45	22	50	M12	10,5	8	18	M8×1	—	57	5	3 100	2 260	25
8	45	22	50	M12	10,5	8	18	M8×1	3	57	5	3 100	2 260	
9	52	29	55	M16	13,5	10	20	M8×1	—	57	5	3 750	2 850	30
9	52	29	55	M16	13,5	10	20	M8×1	3	57	5	3 750	2 850	
9	60	36	67	M20	15,5	12	24	M8×1	—	56	5	6 300	4 350	40
9	60	36	67	M20	15,5	12	24	M8×1	4	56	5	6 300	4 350	
9	70	36	78	M20	17,5	12	26	M8×1	—	54	5	9 300	6 500	50
9	70	36	78	M20	17,5	12	26	M8×1	5	54	5	9 300	6 500	

Linear ball bearing and housing units

Closed design with centring collar

Series KTFN...-C-PP-AS



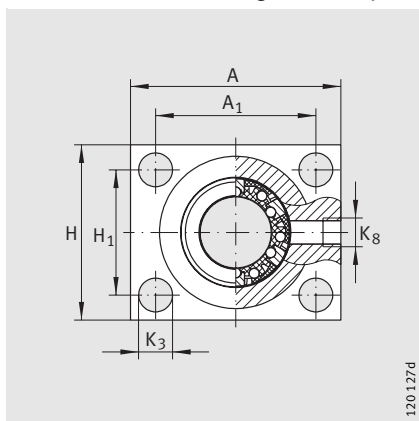
KTFN...-C-PP-AS

Dimension table · Dimensions in mm

Shaft diameter	Designation	Mass	Dimensions				Mounting dimensions			
			d	A	C	H	A ₁	C ₁	C ₃	C ₇
d		≈kg					±0,15			
12	KTFN12-C-PP-AS	0,2	12	42	70	34	32	46	10	35
16	KTFN16-C-PP-AS	0,3	16	50	78	40	38	50	10	39
20	KTFN20-C-PP-AS	0,5	20	60	96	50	45	60	10	48
25	KTFN25-C-PP-AS	1	25	74	122	60	56	73	10	61
30	KTFN30-C-PP-AS	1,4	30	84	142	70	64	82	10	71

1) Recommended locating bore D₁ H7.

2) The basic load ratings are valid only for hardened (670 HV + 170 HV) and ground shaft raceways.



KTFN..-C-PP-AS

D	D ₁ ¹⁾ g7	D ₂ -0,1 -0,3	H ₁ ±0,15	H ₇	K ₂	K ₃	K ₈	Ball rows Number	Basic load ratings ²⁾		Shaft diameter d
									dyn. C	stat. C ₀	
22	30	29,8	24	13	M6	5,3	M8×1	5	1 270	1 110	12
26	35	34,8	28	18	M8	6,6	M8×1	5	1 620	1 500	16
32	42	41,8	35	22	M10	8,4	M8×1	6	2 850	2 480	20
40	52	51,8	42	26	M12	10,5	M8×1	6	5 000	4 450	25
47	61	60,8	50	35	M16	13,5	M8×1	6	6 100	5 800	30

Schaeffler KG

Linear Technology Division
66424 Homburg/Saar (Germany)
Internet www.ina.com
E-Mail info.linear@de.ina.com

In Germany:

Phone 0180 5003872
Fax 0180 5003873

From Other Countries:

Phone +49 6841 701-0
Fax +49 6841 701-625

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