

Series 25, 23, 28 profile bearing

Standard Series type 21, Normal bearing, normal number of holes profile ring

Double number of holes see curves 12 – 18, page 88

Bearing without gearing		Geometry									
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	Ø A mm	Ø C mm	H _u mm	H _o mm
5	230.20.0400.013 Type 21/520.0	414	518	304	56	412,5	415,5	453	375	10,5	10,5
6	230.20.0500.013 Type 21/650.0	544	648	434	56	542,5	545,5	583	505	10,5	10,5
7	230.20.0600.013 Type 21/750.0	644	748	534	56	642,5	645,5	683	605	10,5	10,5
8	230.20.0700.013 Type 21/850.0	744	848	634	56	742,5	745,5	783	705	10,5	10,5
9	230.20.0800.013 Type 21/950.0	844	948	734	56	842,5	845,5	883	805	10,5	10,5
10	230.20.0900.013 Type 21/1050.0	944	1048	834	56	942,5	945,5	983	905	10,5	10,5
11	230.20.1000.013 Type 21/1200.0	1094	1198	984	56	1092,5	1095,5	1133	1055	10,5	10,5

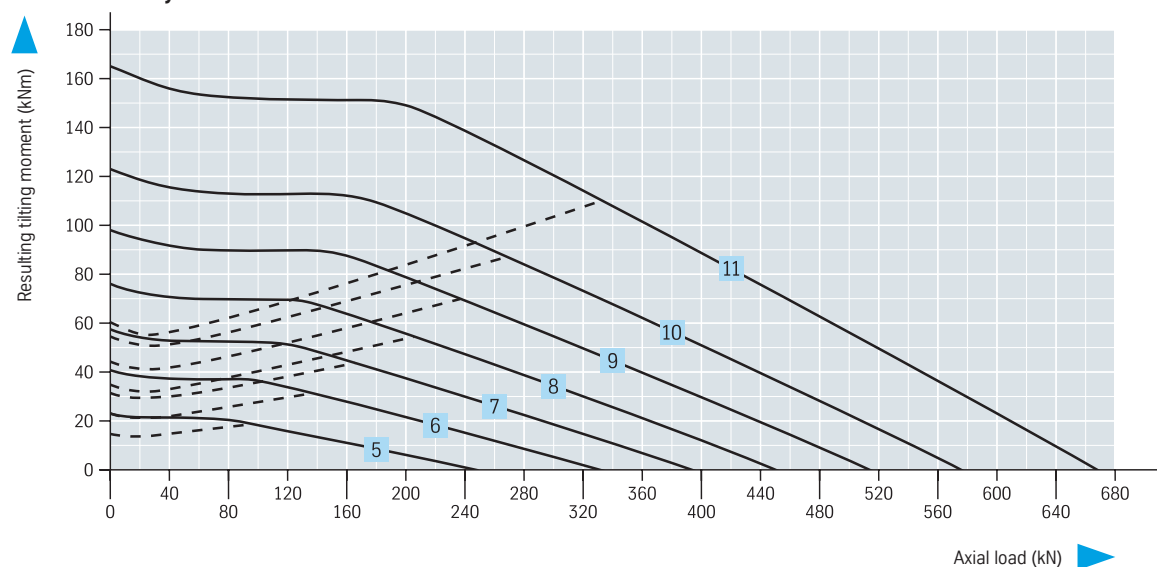
If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.

Dimensions of these centering spigots:

	outside	inside
Type 21/520 ... 21/650	– 0,5 mm	+ 0,5 mm
Type 21/750 ... 21/950	– 0,6 mm	+ 0,6 mm
Type 21/1050 ... 21/1200	– 0,7 mm	+ 0,7 mm

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment						Miscellaneous			
$\varnothing L_a$ mm	n_a	$\varnothing B$ mm	$\varnothing L_i$ mm	n_i	$\varnothing B$ mm	 kg	n_i	Y axial mm	Y radial mm
490	8	18	332	12	18	23,4	4	$\leq 0,5$	$\leq 0,5$
620	10	18	462	14	18	31,0	4	$\leq 0,5$	$\leq 0,5$
720	12	18	562	16	18	36,4	4	$\leq 0,5$	$\leq 0,5$
820	12	18	662	16	18	42,8	4	$\leq 0,5$	$\leq 0,5$
920	14	18	762	18	18	47,8	4	$\leq 0,5$	$\leq 0,5$
1020	16	18	862	20	18	53,1	4	$\leq 0,5$	$\leq 0,5$
1170	16	18	1012	20	18	61,9	4	$\leq 0,5$	$\leq 0,5$

► n_i = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

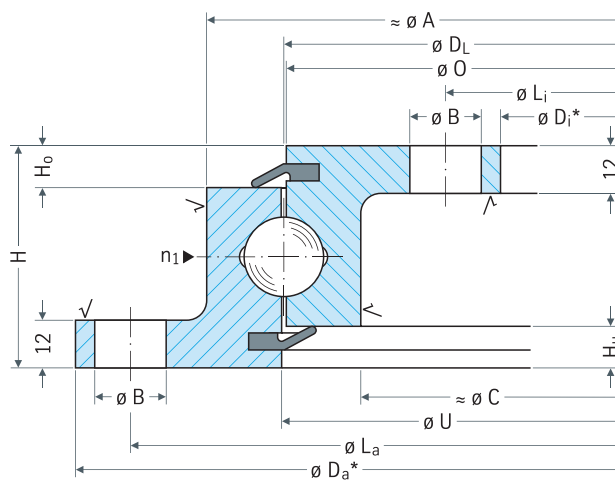
On request, with non-geared bearings, the grease nipples can also be attached on the inner ring.

✓ = $\sqrt{\text{rolled}}$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

- ≤ 315 mm ± 1,6 mm
- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Normal bearing, normal number of holes profile ring

Double number of holes see curves 12 – 18, page 90

Bearing with external gearing		Geometry								Attachment	
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	Ø C mm	H _u mm	Ø L _a mm	n _a
5	231.20.0400.013 Type 21/520.1	414	504	304	56	412,5	415,5	375	10,5	455	10
6	231.20.0500.013 Type 21/650.1	544	640,8	434	56	542,5	545,5	505	10,5	585	14
7	231.20.0600.013 Type 21/750.1	644	742,8	534	56	642,5	645,5	605	10,5	685	16
8	231.20.0700.013 Type 21/850.1	744	838,8	634	56	742,5	745,5	705	10,5	785	18
9	231.20.0800.013 Type 21/950.1	844	950,4	734	56	842,5	845,5	805	10,5	885	18
10	231.20.0900.013 Type 21/1050.1	944	1046,4	834	56	942,5	945,5	905	10,5	985	20
11	231.20.1000.013 Type 21/1200.1	1094	1198,4	984	56	1092,5	1095,5	1055	10,5	1135	22

$\varnothing D_a$ from 1991 tip relief 0,1 · m

If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.

Dimensions of these centering spigots:

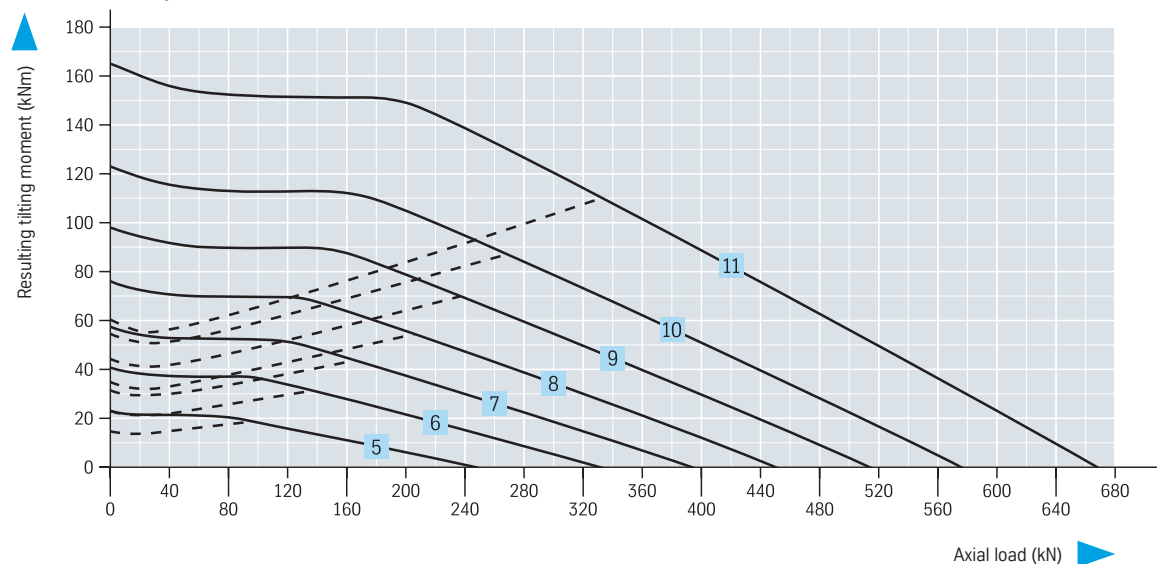
	outside	inside
Type 21/520 ... 21/650	– 0,5 mm	+ 0,5 mm
Type 21/750 ... 21/950	– 0,6 mm	+ 0,6 mm
Type 21/1050 ... 21/1200	– 0,7 mm	+ 0,7 mm

Centering height $H_z^* = 4,5$ mm

Centering height of the companion structure = $(H_z - 1)$ mm

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment					Gearing							Miscellaneous			
M mm	t mm	Ø L _i mm	n _i	Ø B mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	n ₁	Y axial mm	Y radial mm
12	20	332	12	18	495	5	99	- 0,5	45,5	11,75	23,50	29,3	4	≤ 0,5	≤ 0,5
12	20	462	14	18	630	6	105	- 0,6	45,5	14,20	28,40	39,5	4	≤ 0,5	≤ 0,5
12	20	562	16	18	732	6	122	- 0,6	45,5	14,20	28,40	47,6	4	≤ 0,5	≤ 0,5
12	20	662	16	18	828	6	138	- 0,6	45,5	14,20	28,40	53,5	4	≤ 0,5	≤ 0,5
12	20	762	18	18	936	8	117	- 0,8	45,5	18,93	37,86	65,1	4	≤ 0,5	≤ 0,5
12	20	862	20	18	1032	8	129	- 0,8	45,5	18,93	37,86	69,6	4	≤ 0,5	≤ 0,5
12	20	1012	20	18	1184	8	148	- 0,8	45,5	18,93	37,86	83,0	4	≤ 0,5	≤ 0,5

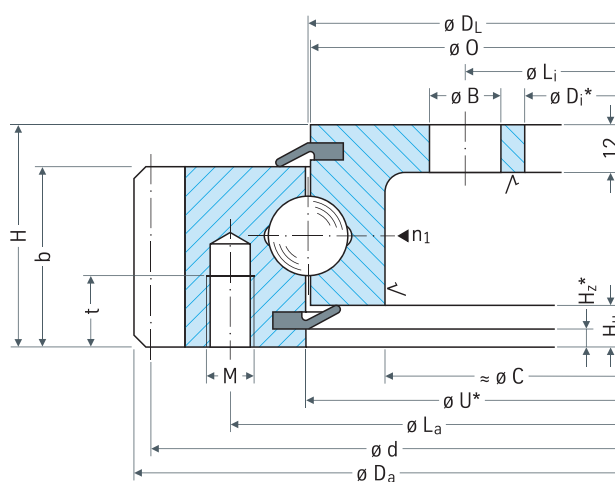
► n₁ = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

✓ = $\sqrt{\text{rolled}}$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

- ≤ 315 mm ± 1,6 mm
- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Normal bearing, normal number of holes profile ring

Double number of holes see curves 12 – 18, page 92

Bearing with internal gearing		Geometry								Attachment		
Drawing number		$\emptyset D_L$ mm	$\emptyset D_a$ mm	$\emptyset D_i$ mm	H mm	$\emptyset O$ mm	$\emptyset U$ mm	$\emptyset C$ mm	H_u mm	$\emptyset L_a$ mm	n_a	$\emptyset B$ mm
5	232.20.0400.013 Type 21/520.2	414	518	326,5	56	412,5	415,5	453	10,5	490	8	18
6	232.20.0500.013 Type 21/650.2	544	648	445,2	56	542,5	545,5	583	10,5	620	10	18
7	232.20.0600.013 Type 21/750.2	644	748	547,2	56	642,5	645,5	683	10,5	720	12	18
8	232.20.0700.013 Type 21/850.2	744	848	649,2	56	742,5	745,5	783	10,5	820	12	18
9	232.20.0800.013 Type 21/950.2	844	948	737,6	56	842,5	845,5	883	10,5	920	14	18
10	232.20.0900.013 Type 21/1050.2	944	1048	841,6	56	942,5	945,5	983	10,5	1020	16	18
11	232.20.1000.013 Type 21/1200.2	1094	1198	985,6	56	1092,5	1095,5	1133	10,5	1170	16	18

If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.

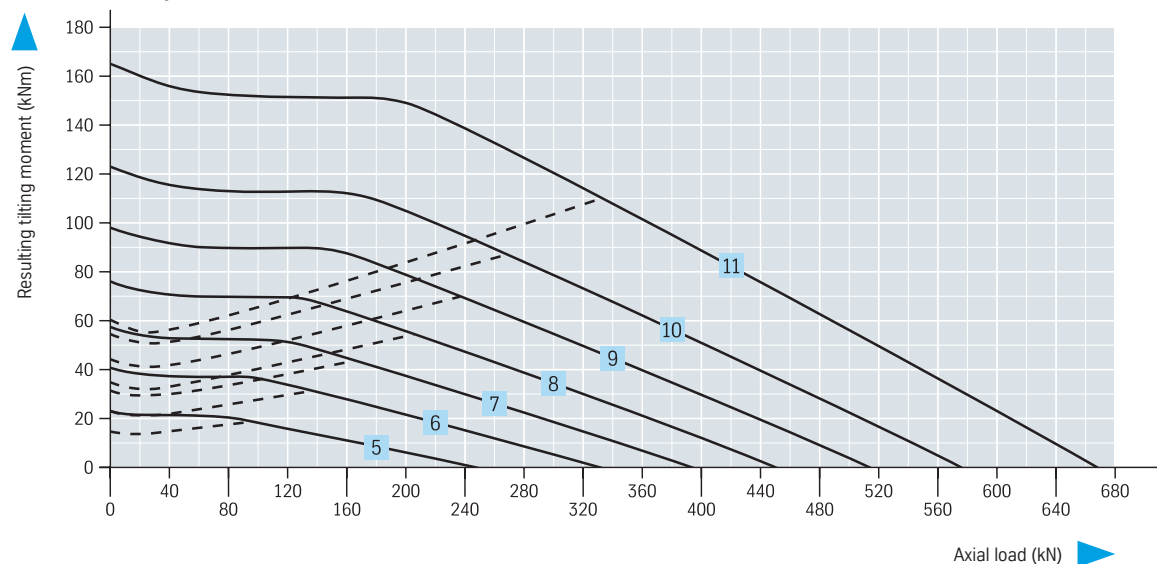
Dimensions of these centering spigots:

	outside	inside
Type 21/520 ... 21/650	– 0,5 mm	+ 0,5 mm
Type 21/750 ... 21/950	– 0,6 mm	+ 0,6 mm
Type 21/1050 ... 21/1200	– 0,7 mm	+ 0,7 mm

Centering height $H_z^* = 4,5$ mm
Centering height of the companion structure = $(H_z - 1)$ mm

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment				Gearing						Miscellaneous				
$\emptyset L_1$ mm	n_1	M mm	t mm	d mm	m mm	z	$k \cdot m$ mm	b mm	X1 kN	X2 kN	 kg	n_1	Y axial mm	Y radial mm
375	12	12	20	335	5	67	-0,75	45,5	13,54	27,08	27,1	4	$\leq 0,5$	$\leq 0,5$
505	16	12	20	456	6	76	-0,60	45,5	16,00	32,00	36,9	4	$\leq 0,5$	$\leq 0,5$
605	18	12	20	558	6	93	-0,60	45,5	15,62	31,24	43,7	4	$\leq 0,5$	$\leq 0,5$
705	20	12	20	660	6	110	-0,60	45,5	15,32	30,64	51,1	4	$\leq 0,5$	$\leq 0,5$
805	20	12	20	752	8	94	-0,80	45,5	20,80	41,60	61,6	4	$\leq 0,5$	$\leq 0,5$
905	22	12	20	856	8	107	-0,80	45,5	20,49	40,98	65,8	4	$\leq 0,5$	$\leq 0,5$
1055	24	12	20	1000	8	125	-0,80	45,5	20,16	40,32	80,7	4	$\leq 0,5$	$\leq 0,5$

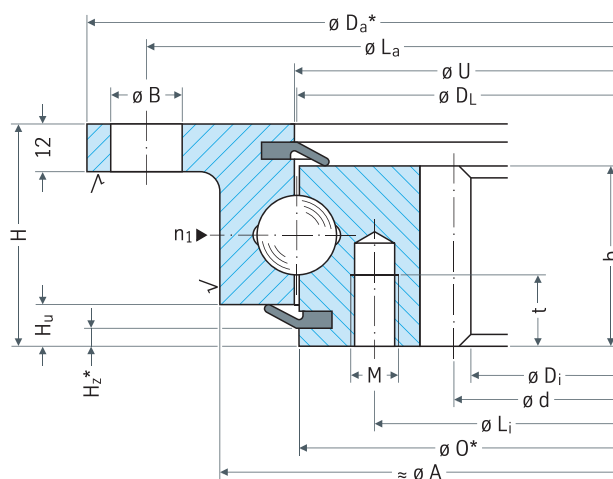
► n_1 = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

✓ = $\sqrt{\text{rolled}}$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

$\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
 $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Normal bearing, double number of holes profile ring

One hole is missing in the area of the filler plug

Bearing without gearing		Geometry									
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	Ø A mm	Ø C mm	H _u mm	H _o mm
12	230.20.0400.503 Type 21/520.0	414	518	304	56	412,5	415,5	453	375	10,5	10,5
13	230.20.0500.503 Type 21/650.0	544	648	434	56	542,5	545,5	583	505	10,5	10,5
14	230.20.0600.503 Type 21/750.0	644	748	534	56	642,5	645,5	683	605	10,5	10,5
15	230.20.0700.503 Type 21/850.0	744	848	634	56	742,5	745,5	783	705	10,5	10,5
16	230.20.0800.503 Type 21/950.0	844	948	734	56	842,5	845,5	883	805	10,5	10,5
17	230.20.0900.503 Type 21/1050.0	944	1048	834	56	942,5	945,5	983	905	10,5	10,5
18	230.20.1000.503 Type 21/1200.0	1094	1198	984	56	1092,5	1095,5	1133	1055	10,5	10,5

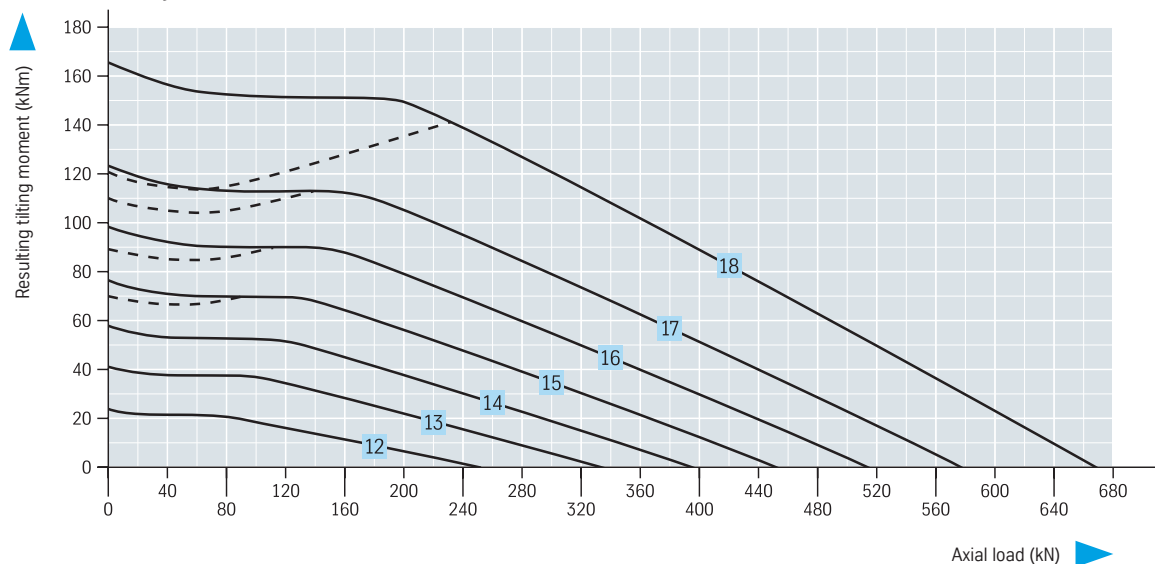
If centering spigots are required for normal bearings, these must be specified when the order is placed.

Centering spigots are only possible if * is indicated for the nominal diameter.

Dimensions of these centering spigots:

	outside	inside
Type 21/520 ... 21/650	- 0,5 mm	+ 0,5 mm
Type 21/750 ... 21/950	- 0,6 mm	+ 0,6 mm
Type 21/1050 ... 21/1200	- 0,7 mm	+ 0,7 mm

Static boundary load curves



Attachment						Miscellaneous			
$\varnothing L_a$ mm	n_a	$\varnothing B$ mm	$\varnothing L_i$ mm	n_i	$\varnothing B$ mm	 kg	n_i	Y axial mm	Y radial mm
490	16	18	332	24	18	23,0	4	$\leq 0,5$	$\leq 0,5$
620	20	18	462	28	18	30,4	4	$\leq 0,5$	$\leq 0,5$
720	24	18	562	32	18	35,8	4	$\leq 0,5$	$\leq 0,5$
820	24	18	662	32	18	42,2	4	$\leq 0,5$	$\leq 0,5$
920	28	18	762	36	18	47,1	4	$\leq 0,5$	$\leq 0,5$
1020	32	18	862	40	18	52,3	4	$\leq 0,5$	$\leq 0,5$
1170	32	18	1012	40	18	61,1	4	$\leq 0,5$	$\leq 0,5$

- n_i = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

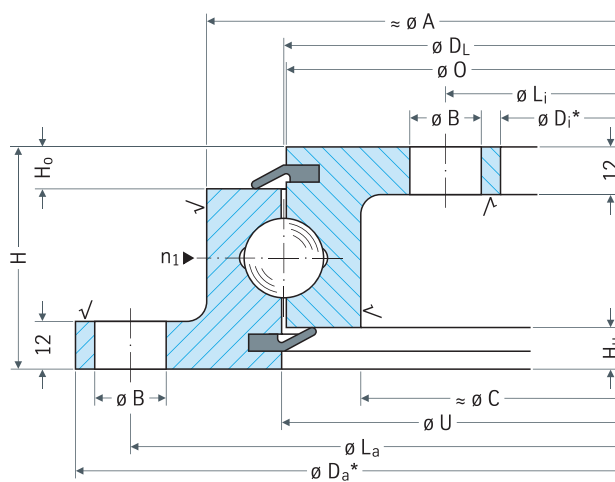
On request, with non-geared bearings, the grease nipples can also be attached on the inner ring.

✓ = $\sqrt{\text{rolled}}$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

- ≤ 315 mm $\pm 1,6$ mm
- ≤ 1000 mm $\pm 2,5$ mm
- ≤ 2000 mm $\pm 3,5$ mm



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Normal bearing, double number of holes profile ring

One hole is missing in the area of the filler plug

Bearing with external gearing		Geometry								Attachment		
Drawing number		$\emptyset D_L$ mm	$\emptyset D_a$ mm	$\emptyset D_i$ mm	H mm	$\emptyset O$ mm	$\emptyset U$ mm	$\emptyset C$ mm	H_u mm	$\emptyset L_a$ mm	n_a	M mm
12	231.20.0400.503 Type 21/520.1	414	504	304	56	412,5	415,5	375	10,5	455	10	12
13	231.20.0500.503 Type 21/650.1	544	640,8	434	56	542,5	545,5	505	10,5	585	14	12
14	231.20.0600.503 Type 21/750.1	644	742,8	534	56	642,5	645,5	605	10,5	685	16	12
15	231.20.0700.503 Type 21/850.1	744	838,8	634	56	742,5	745,5	705	10,5	785	18	12
16	231.20.0800.503 Type 21/950.1	844	950,4	734	56	842,5	845,5	805	10,5	885	18	12
17	231.20.0900.503 Type 21/1050.1	944	1046,4	834	56	942,5	945,5	905	10,5	985	20	12
18	231.20.1000.503 Type 21/1200.1	1094	1198,4	984	56	1092,5	1095,5	1055	10,5	1135	22	12

$\emptyset D_a$ from 1991 tip relief 0,1 · m

If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.

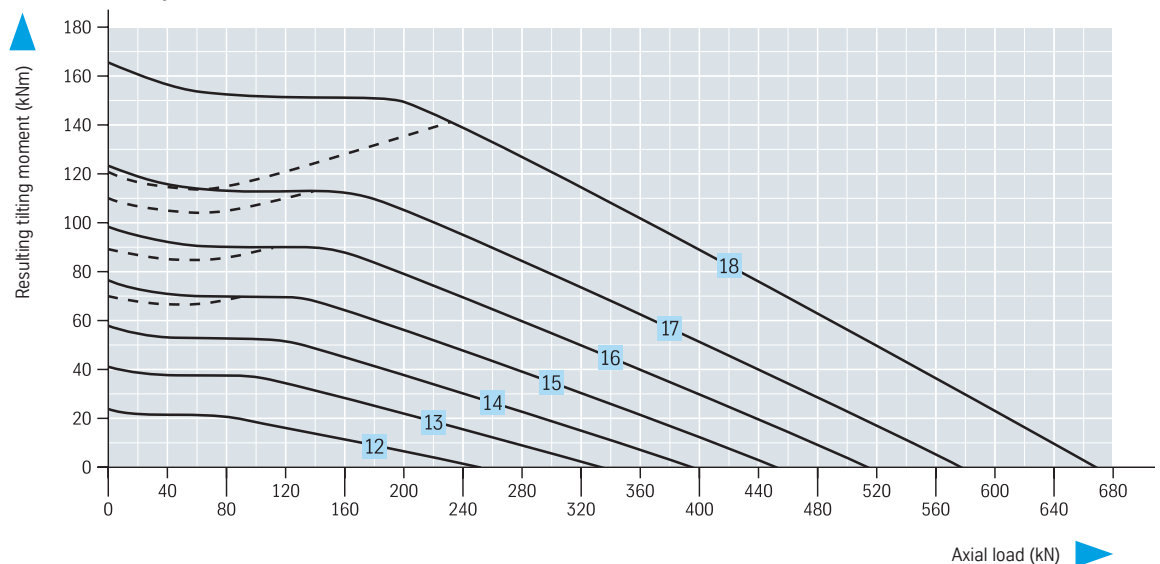
Dimensions of these centering spigots:

	outside	inside
Type 21/520 ... 21/650	- 0,5 mm	+ 0,5 mm
Type 21/750 ... 21/950	- 0,6 mm	+ 0,6 mm
Type 21/1050 ... 21/1200	- 0,7 mm	+ 0,7 mm

Centering height $H_z^* = 4,5$ mm

Centering height of the companion structure = $(H_z - 1)$ mm

Static boundary load curves



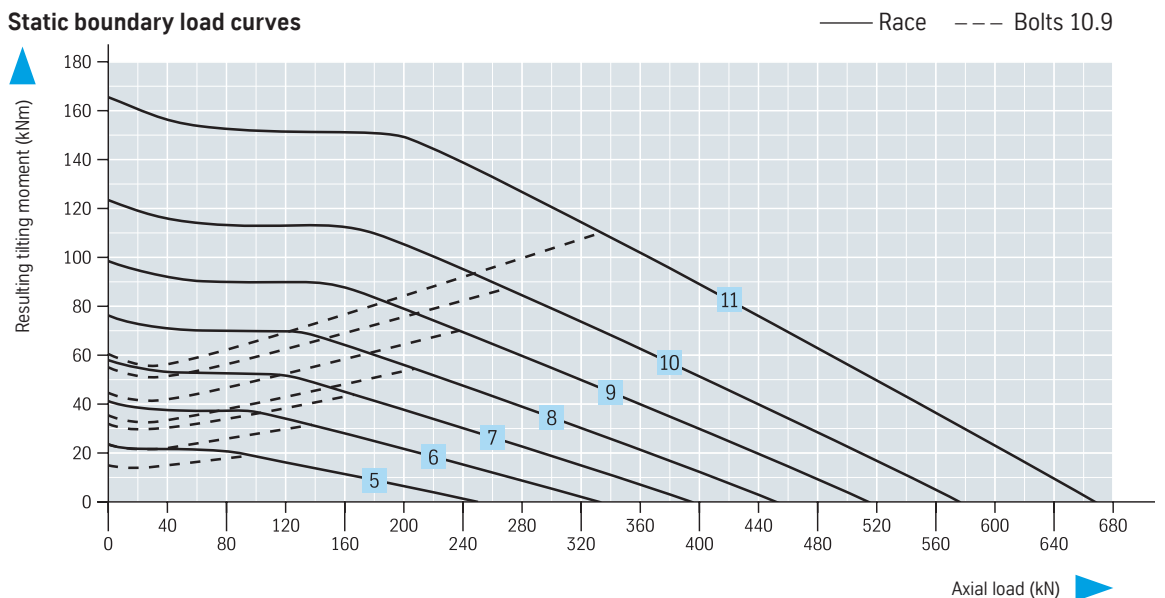
Series 25, 23, 28 profile bearing

Standard Series type 21, Bearing with restricted play

Bearing without gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	$\varnothing A$ mm	$\varnothing C$ mm	H_u mm	H_o mm
5	230.21.0475.013 Type 21/520.0	414	517 - 0,11	305 + 0,08	56	412,5	415,5	453	375	10,5	10,5
6	230.21.0575.013 Type 21/650.0	544	647 - 0,13	435 + 0,10	56	542,5	545,5	583	505	10,5	10,5
7	230.21.0675.013 Type 21/750.0	644	747 - 0,13	535 + 0,11	56	642,5	645,5	683	605	10,5	10,5
8	230.21.0775.013 Type 21/850.0	744	847 - 0,14	635 + 0,13	56	742,5	745,5	783	705	10,5	10,5
9	230.21.0875.013 Type 21/950.0	844	947 - 0,14	735 + 0,13	56	842,5	845,5	883	805	10,5	10,5
10	230.21.0975.013 Type 21/1050.0	944	1047 - 0,17	835 + 0,14	56	942,5	945,5	983	905	10,5	10,5
11	230.21.1075.013 Type 21/1200.0	1094	1197 - 0,17	985 + 0,14	56	1092,5	1095,5	1133	1055	10,5	10,5

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment						Miscellaneous		
$\varnothing L_a$ mm	n_a	$\varnothing B$ mm	$\varnothing L_i$ mm	n_i	$\varnothing B$ mm	 kg	n_1	Y axial + radial mm
490	8	18	332	12	18	23,4	4	≥ 0 to 0,03
620	10	18	462	14	18	31,0	4	≥ 0 to 0,03
720	12	18	562	16	18	36,4	4	≥ 0 to 0,04
820	12	18	662	16	18	42,8	4	≥ 0 to 0,04
920	14	18	762	18	18	47,8	4	≥ 0 to 0,05
1020	16	18	862	20	18	53,1	4	≥ 0 to 0,05
1170	16	18	1012	20	18	61,9	4	≥ 0 to 0,06

- n_1 = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

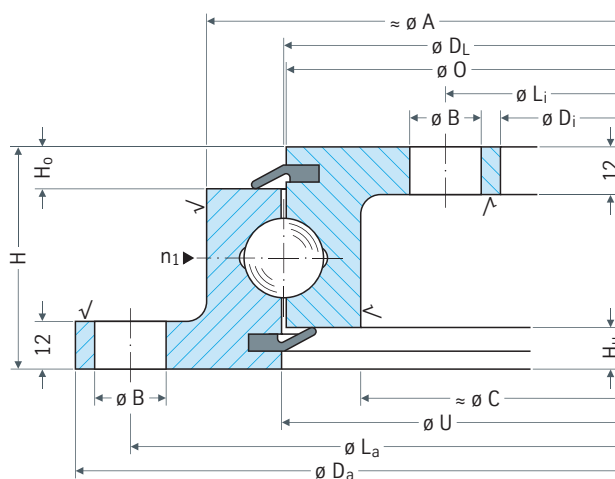
On request, with non-geared bearings, the grease nipples can also be attached on the inner ring.

$$\checkmark = \sqrt{\text{rolled}}$$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

- ≤ 315 mm ± 1,6 mm
- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Bearing with restricted play

Bearing with external gearing		Geometry								Attachment		
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	$\varnothing C$ mm	H_u mm	$\varnothing L_a$ mm	n_a	M mm
5	231.21.0475.013 Type 21/520.1	414	504	305 + 0,08	56	412,5	417 + 0,10	375	10,5	455	10	12
6	231.21.0575.013 Type 21/650.1	544	640,8	435 + 0,10	56	542,5	547 + 0,11	505	10,5	585	14	12
7	231.21.0675.013 Type 21/750.1	644	742,8	535 + 0,11	56	642,5	647 + 0,13	605	10,5	685	16	12
8	231.21.0775.013 Type 21/850.1	744	838,8	635 + 0,13	56	742,5	747 + 0,13	705	10,5	785	18	12
9	231.21.0875.013 Type 21/950.1	844	950,4	735 + 0,13	56	842,5	847 + 0,14	805	10,5	885	18	12
10	231.21.0975.013 Type 21/1050.1	944	1046,4	835 + 0,14	56	942,5	947 + 0,14	905	10,5	985	20	12
11	231.21.1075.013 Type 21/1200.1	1094	1198,4	985 + 0,14	56	1092,5	1097 + 0,17	1055	10,5	1135	22	12

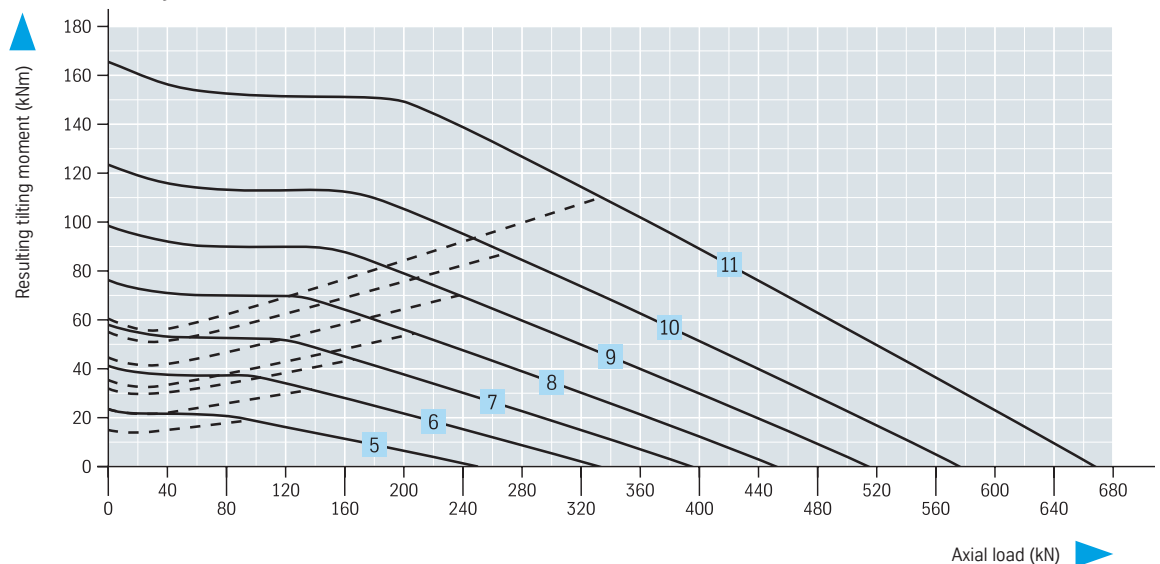
$\varnothing D_a$ from 1991 tip relief 0,1 · m

Centering height $H_z^* = 4,5$ mm

Centering height of the companion structure = $(H_z - 1)$ mm

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment				Gearing						Miscellaneous			
t mm	Ø L _i mm	n ₁	Ø B mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	kg	n ₁	Y axial + radial mm
20	332	12	18	495	5	99	- 0,5	45,5	11,75	23,50	29,3	4	≥ 0 to 0,03
20	462	14	18	630	6	105	- 0,6	45,5	14,20	28,40	39,5	4	≥ 0 to 0,03
20	562	16	18	732	6	122	- 0,6	45,5	14,20	28,40	47,6	4	≥ 0 to 0,04
20	662	16	18	828	6	138	- 0,6	45,5	14,20	28,40	53,5	4	≥ 0 to 0,04
20	762	18	18	936	8	117	- 0,8	45,5	18,93	37,86	65,1	4	≥ 0 to 0,05
20	862	20	18	1032	8	129	- 0,8	45,5	18,93	37,86	69,6	4	≥ 0 to 0,05
20	1012	20	18	1184	8	148	- 0,8	45,5	18,93	37,86	83,0	4	≥ 0 to 0,06

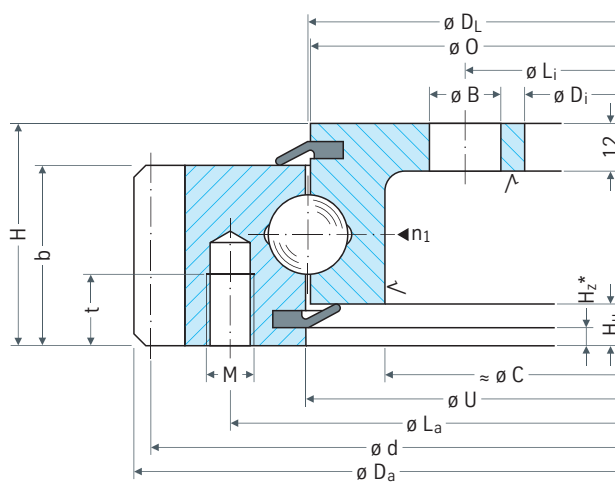
► n₁ = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

✓ = ✓^{rolled}

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

- ≤ 315 mm ± 1,6 mm
- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
25, 23, 28

Series 25, 23, 28 profile bearing

Standard Series type 21, Bearing with restricted play

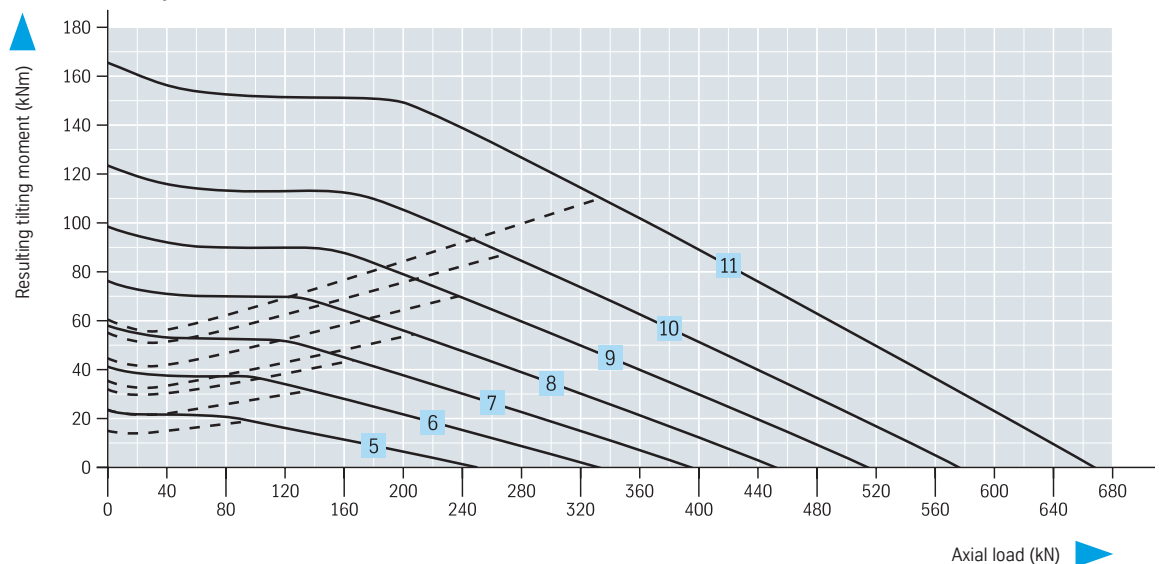
Bearing with internal gearing		Geometry								Attachment		
Drawing number		$\emptyset D_L$ mm	$\emptyset D_a$ mm	$\emptyset D_i$ mm	H mm	$\emptyset O$ mm	$\emptyset U$ mm	$\emptyset A$ mm	H_u mm	$\emptyset L_a$ mm	n_a	$\emptyset B$ mm
5	232.21.0475.013 Type 21/520.2	414	517 -0,11	326,5	56	411 -0,10	415,5	453	10,5	490	8	18
6	232.21.0575.013 Type 21/650.2	544	647 -0,13	445,2	56	541 -0,11	545,5	583	10,5	620	10	18
7	232.21.0675.013 Type 21/750.2	644	747 -0,13	547,2	56	641 -0,13	645,5	683	10,5	720	12	18
8	232.21.0775.013 Type 21/850.2	744	847 -0,14	649,2	56	741 -0,13	745,5	783	10,5	820	12	18
9	232.21.0875.013 Type 21/950.2	844	947 -0,14	737,6	56	841 -0,14	845,5	883	10,5	920	14	18
10	232.21.0975.013 Type 21/1050.2	944	1047 -0,17	841,6	56	941 -0,14	945,5	983	10,5	1020	16	18
11	232.21.1075.013 Type 21/1200.2	1094	1197 -0,17	985,6	56	1091 -0,17	1095,5	1133	10,5	1170	16	18

Centering height $H_z^* = 4,5$ mm

Centering height of the companion structure = $(H_z - 1)$ mm

For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.

Static boundary load curves



Attachment				Gearing						Miscellaneous			
$\emptyset L_i$ mm	n_1	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	n_1	Y axial + radial mm
375	12	12	20	335	5	67	- 0,75	45,5	13,54	27,08	27,1	4	≥ 0 to 0,03
505	16	12	20	456	6	76	- 0,60	45,5	16,00	32,00	36,9	4	≥ 0 to 0,03
605	18	12	20	558	6	93	- 0,60	45,5	15,62	31,24	43,7	4	≥ 0 to 0,04
705	20	12	20	660	6	110	- 0,60	45,5	15,32	30,64	51,1	4	≥ 0 to 0,04
805	20	12	20	752	8	94	- 0,80	45,5	20,80	41,60	61,6	4	≥ 0 to 0,05
905	22	12	20	856	8	107	- 0,80	45,5	20,49	40,98	65,8	4	≥ 0 to 0,05
1055	24	12	20	1000	8	125	- 0,80	45,5	20,16	40,32	80,7	4	≥ 0 to 0,06

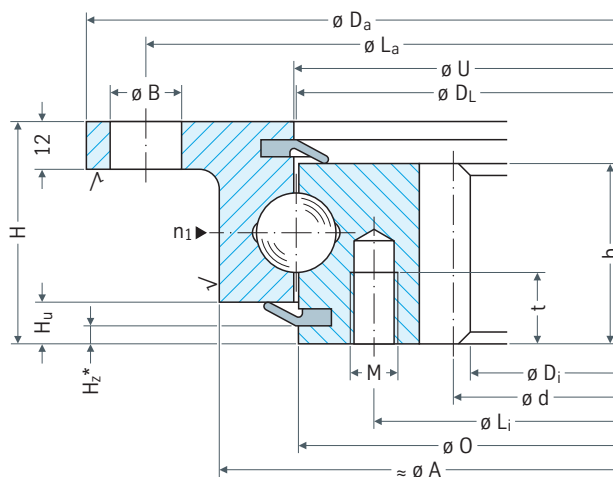
► n_1 = Tapered grease nipple
AM 8 x 1 DIN 71412
≈ evenly distributed

✓ = $\sqrt{\text{rolled}}$

Diameter tolerances

Machined diameters with untoleranced drawing dimensions have the following tolerances:

≤ 1000 mm ± 2,5 mm
≤ 2000 mm ± 3,5 mm



Bearing
selection series
25, 23, 28

Series 06 Single-row four-point bearing

Standard Series type 621, Normal bearing

Bearing without gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	060.20.0414.500.01.1503	414	486	342	56	412,5	415,5	45,5	45,5	10,5	10,5
2	060.20.0544.500.01.1503	544	616	472	56	542,5	545,5	45,5	45,5	10,5	10,5
3	060.20.0644.500.01.1503	644	716	572	56	642,5	645,5	45,5	45,5	10,5	10,5
4	060.20.0744.500.01.1503	744	816	672	56	742,5	745,5	45,5	45,5	10,5	10,5
5	060.20.0844.500.01.1503	844	916	772	56	842,5	845,5	45,5	45,5	10,5	10,5
6	060.20.0944.500.01.1503	944	1016	872	56	942,5	945,5	45,5	45,5	10,5	10,5
7	060.20.1094.500.01.1503	1094	1166	1022	56	1092,5	1095,5	45,5	45,5	10,5	10,5

centering spigots are required, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal $\varnothing$.

Dimensions of these centering spigots:

D_L 414, 544
 D_L 644, 744, 844
 D_L 944, 1094

outside

- 0,5 mm
 - 0,6 mm
 - 0,7 mm

inside

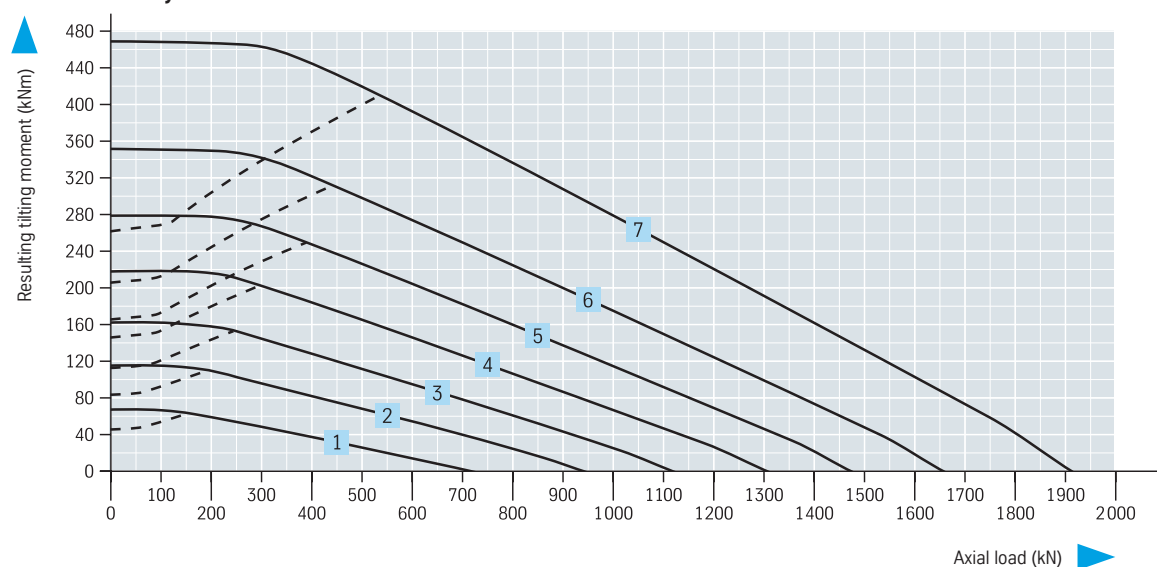
+ 0,5 mm
 + 0,6 mm
 + 0,7 mm

Centering height

H_i = 10 mm
 H_A = 10 mm

Centering height of the companion structure
 max. 9 mm

Static boundary load curves



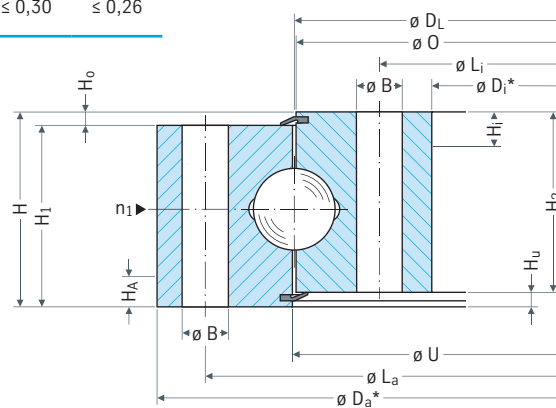
Attachment					Miscellaneous		
$\varnothing L_a$ mm	$\varnothing L_i$ mm	n	$\varnothing B$ mm	M mm	 kg	Y axial mm	Y radial mm
460	368	24	13,5	12	29	$\leq 0,28$	$\leq 0,24$
590	498	32	13,5	12	37	$\leq 0,30$	$\leq 0,26$
690	598	36	13,5	12	44	$\leq 0,30$	$\leq 0,26$
790	698	40	13,5	12	52	$\leq 0,30$	$\leq 0,26$
890	798	40	13,5	12	60	$\leq 0,30$	$\leq 0,26$
990	898	44	13,5	12	67	$\leq 0,30$	$\leq 0,26$
1140	1048	48	13,5	12	77	$\leq 0,30$	$\leq 0,26$

- n_1 = 4 Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

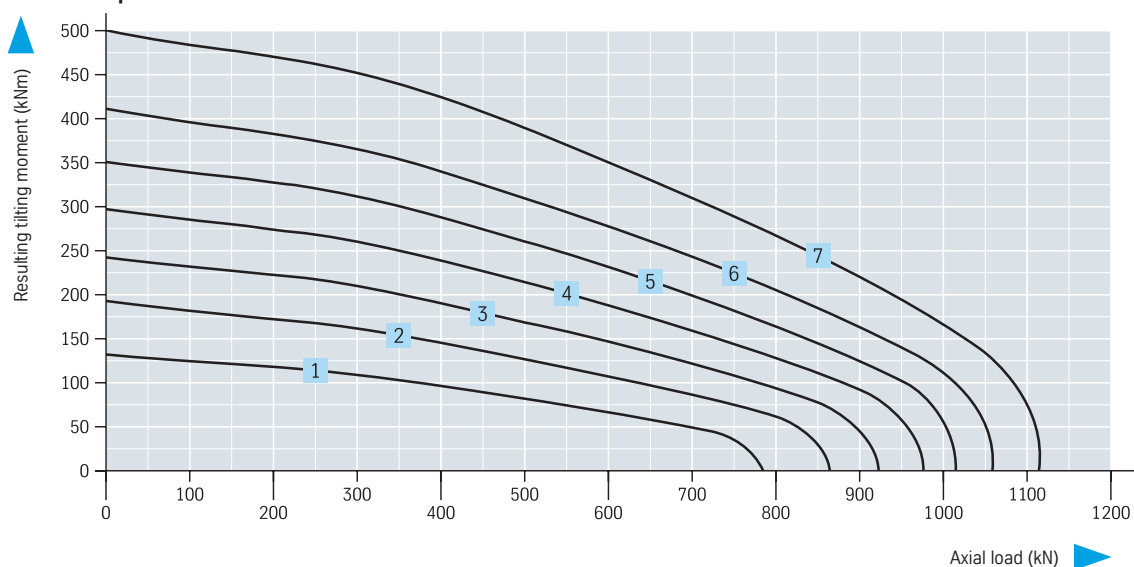
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 621, Normal bearing

Bearing with external gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H_1 mm	H_2 mm	H_u mm	H_o mm
1	061.20.0414.500.01.1503	414	504,0	342	56	412,5	415,5	45,5	45,5	10,5	10,5
2	061.20.0544.500.01.1503	544	640,8	472	56	542,5	545,5	45,5	45,5	10,5	10,5
3	061.20.0644.500.01.1503	644	742,8	572	56	642,5	645,5	45,5	45,5	10,5	10,5
4	061.20.0744.500.01.1503	744	838,8	672	56	742,5	745,5	45,5	45,5	10,5	10,5
5	061.20.0844.500.01.1503	844	950,4	772	56	842,5	845,5	45,5	45,5	10,5	10,5
6	061.20.0944.500.01.1503	944	1046,4	872	56	942,5	945,5	45,5	45,5	10,5	10,5
7	061.20.1094.500.01.1503	1094	1198,4	1022	56	1092,5	1095,5	45,5	45,5	10,5	10,5

If centering spigots are required, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal $\varnothing$.

Dimensions of these centering spigots:

DL 414, 544
DL 644, 744, 844
DL 944, 1094

outside

- 0,5 mm
- 0,6 mm
- 0,7 mm

inside

+ 0,5 mm
+ 0,6 mm
+ 0,7 mm

Centering height

$H_i = 10 \text{ mm}$

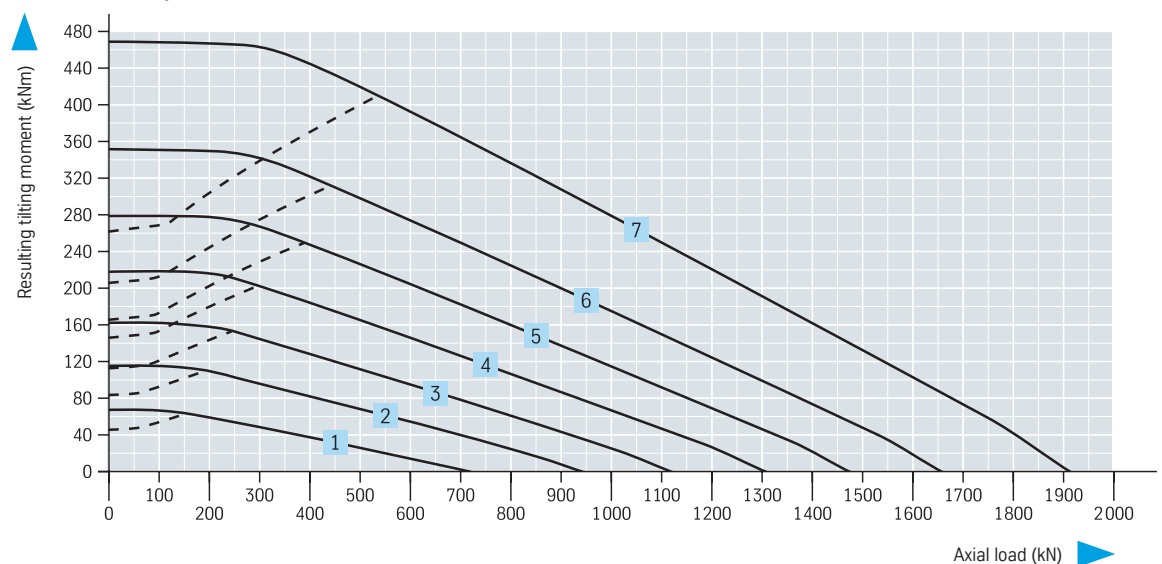
$H_z = 4,5 \text{ mm}$

Centering height of the companion structure

max. $H_i -1 \text{ mm}$

max. $H_z -1 \text{ mm}$

Static boundary load curves



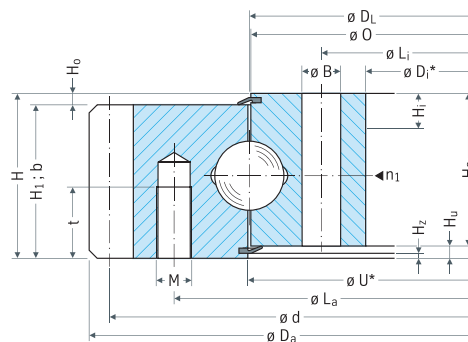
Attachment						Gearing							Miscellaneous		
$\varnothing L_a$ mm	$\varnothing L_i$ mm	n L_a/L_i	$\varnothing B$ mm	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	Y axial mm	Y radial mm
455	368	20/24	13,5	12	20	495	5	99	− 0,5	45,5	11,75	23,50	31	≤ 0,28	≤ 0,24
585	498	28/32	13,5	12	20	630	6	105	− 0,6	45,5	14,20	28,40	43	≤ 0,30	≤ 0,26
685	598	32/36	13,5	12	20	732	6	122	− 0,6	45,5	14,20	28,40	52	≤ 0,30	≤ 0,26
785	698	36/40	13,5	12	20	828	6	138	− 0,6	45,5	14,20	28,40	59	≤ 0,30	≤ 0,26
885	798	36/40	13,5	12	20	936	8	117	− 0,8	45,5	18,93	37,86	71	≤ 0,30	≤ 0,26
985	898	40/44	13,5	12	20	1032	8	129	− 0,8	45,5	18,93	37,86	77	≤ 0,30	≤ 0,26
1135	1048	44/48	13,5	12	20	1184	8	148	− 0,8	45,5	18,93	37,86	91	≤ 0,30	≤ 0,26

- n_1 = 4 Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

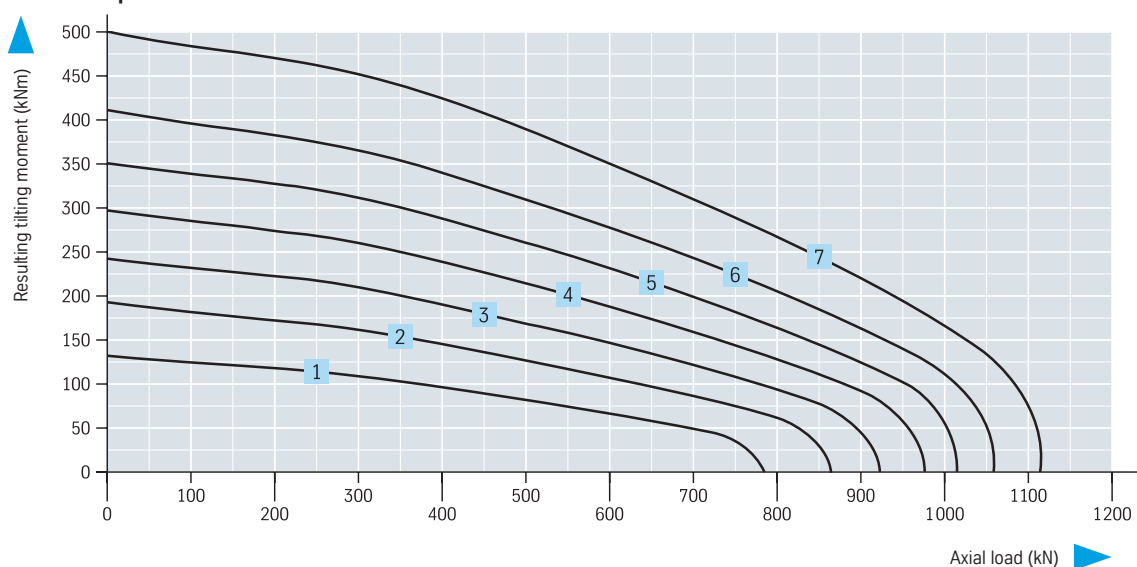
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 621, Normal bearing

Bearing with internal gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	062.20.0414.500.01.1503	414	486	326,5	56	415,5	412,5	45,5	45,5	10,5	10,5
2	062.20.0544.500.01.1503	544	616	445,2	56	545,5	542,5	45,5	45,5	10,5	10,5
3	062.20.0644.500.01.1503	644	716	547,2	56	645,5	642,5	45,5	45,5	10,5	10,5
4	062.20.0744.500.01.1503	744	816	649,2	56	745,5	742,5	45,5	45,5	10,5	10,5
5	062.20.0844.500.01.1503	844	916	737,6	56	845,5	842,5	45,5	45,5	10,5	10,5
6	062.20.0944.500.01.1503	944	1016	841,6	56	945,5	942,5	45,5	45,5	10,5	10,5
7	062.20.1094.500.01.1503	1094	1166	985,6	56	1095,5	1092,5	45,5	45,5	10,5	10,5

If centering spigots are required, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal $\varnothing$.

Dimensions of these centering spigots:

DL 414, 544
DL 644, 744, 844
DL 944, 1094

outside

- 0,5 mm
- 0,6 mm
- 0,7 mm

inside

+ 0,5 mm
+ 0,6 mm
+ 0,7 mm

Centering height

H_Z = 4,5 mm

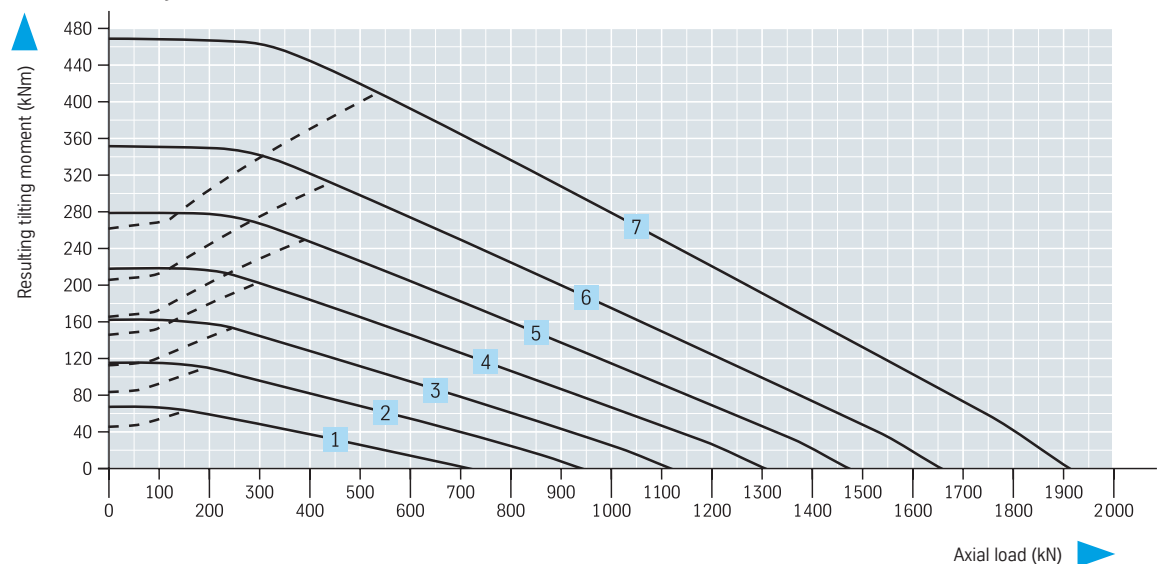
H_A = 10 mm

Centering height of the companion structure

max. H_Z -1 mm

max. H_A -1 mm

Static boundary load curves



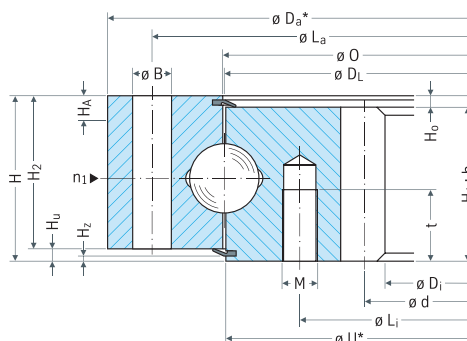
Attachment						Gearing							Miscellaneous		
Ø L _a mm	Ø L _i mm	n	Ø B mm	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	Y axial mm	Y radial mm
460	375	24	13,5	12	20	335	5	67	−0,75	45,5	13,54	27,08	31	≤ 0,28	≤ 0,28
590	505	32	13,5	12	20	456	6	76	−0,60	45,5	16,00	32,00	42	≤ 0,30	≤ 0,30
690	605	36	13,5	12	20	558	6	93	−0,60	45,5	15,62	31,24	50	≤ 0,30	≤ 0,30
790	705	40	13,5	12	20	660	6	110	−0,60	45,5	15,32	30,64	58	≤ 0,30	≤ 0,30
890	805	40	13,5	12	20	752	8	94	−0,80	45,5	20,80	41,60	69	≤ 0,30	≤ 0,30
990	905	44	13,5	12	20	856	8	107	−0,80	45,5	20,49	40,98	76	≤ 0,30	≤ 0,30
1140	1055	48	13,5	12	20	1000	8	125	−0,80	45,5	20,16	40,32	91	≤ 0,30	≤ 0,30

- n_1 = 4 Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

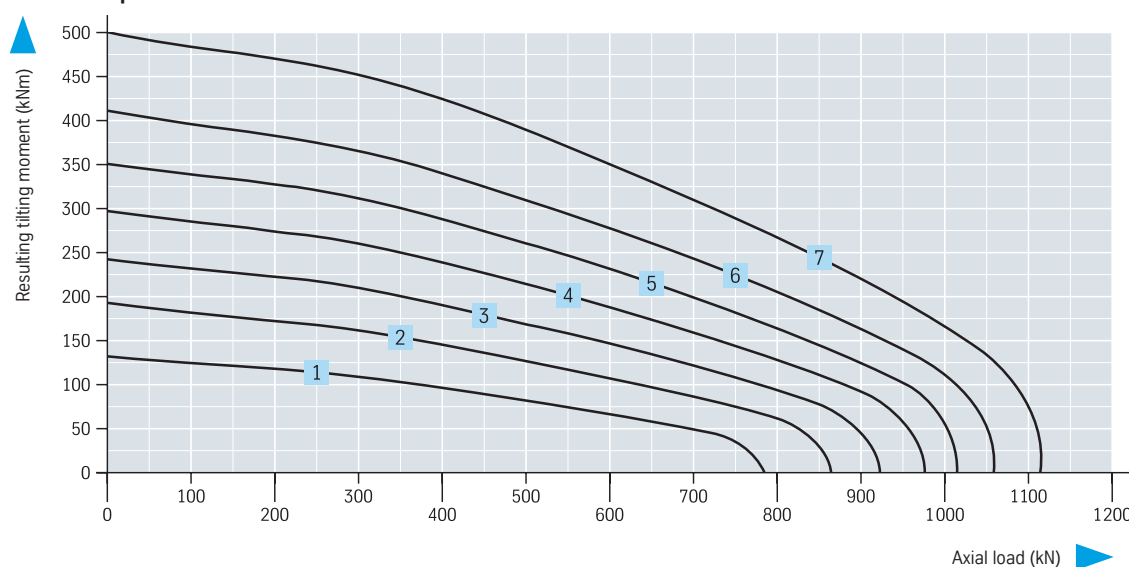
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 621, Bearing with restricted play

Bearing without gearing		Geometry									
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	060.20.0414.575.01.1403	414	484,5 – 0,10	343,5 + 0,09	56	412,5	415,5	45,5	45,5	10,5	10,5
2	060.20.0544.575.01.1403	544	614,5 – 0,11	473,5 + 0,10	56	542,5	545,5	45,5	45,5	10,5	10,5
3	060.20.0644.575.01.1403	644	714,5 – 0,13	573,5 + 0,11	56	642,5	645,5	45,5	45,5	10,5	10,5
4	060.20.0744.575.01.1403	744	814,5 – 0,14	673,5 + 0,13	56	742,5	745,5	45,5	45,5	10,5	10,5
5	060.20.0844.575.01.1403	844	914,5 – 0,14	773,5 + 0,13	56	842,5	845,5	45,5	45,5	10,5	10,5
6	060.20.0944.575.01.1403	944	1014,5 – 0,17	873,5 + 0,14	56	942,5	945,5	45,5	45,5	10,5	10,5
7	060.20.1094.575.01.1403	1094	1164,5 – 0,17	1023,5 + 0,17	56	1092,5	1095,5	45,5	45,5	10,5	10,5

* Tolerance data
applies in each case to
H_i, H_A

Centering height

H_i = 10 mm

H_A = 10 mm

Centering height

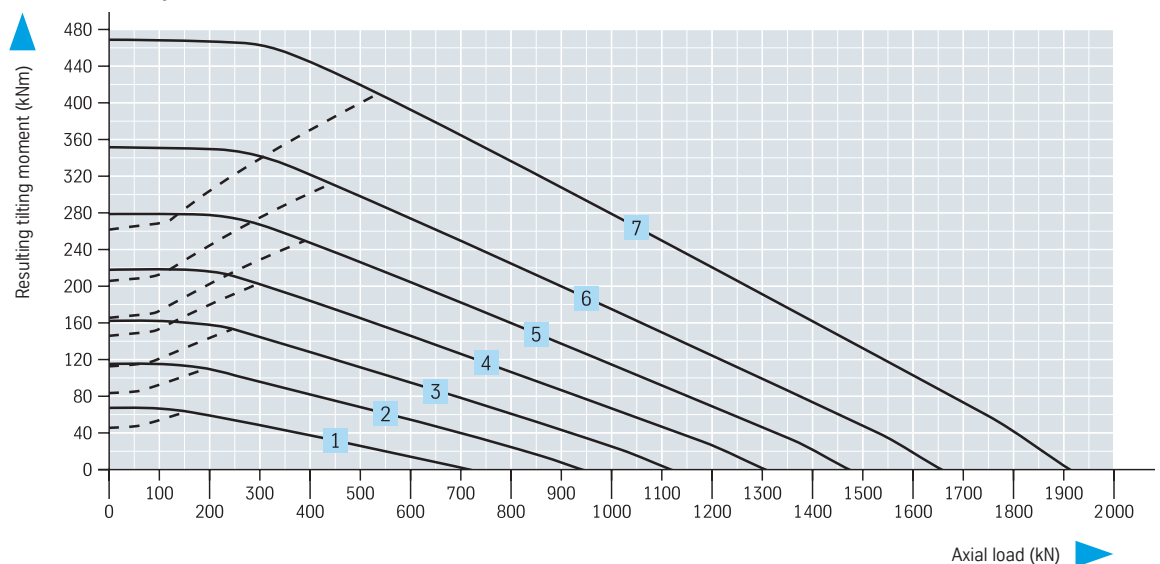
of the companion

structure

max. 9 mm

Static boundary load curves

— Race - - - Bolts 10.9



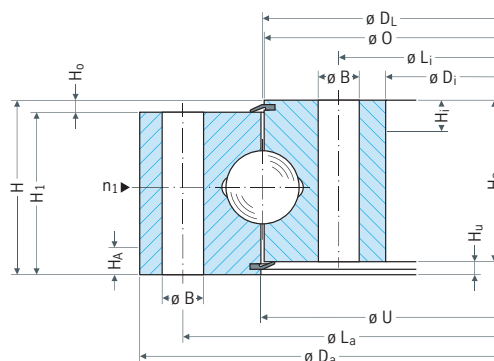
Attachment					Miscellaneous	
$\varnothing L_a$ mm	$\varnothing L_i$ mm	n^*	$\varnothing B$ mm	M mm	 kg	Y axial + radial mm
460	368	24	13,5	12	29	≥ 0 to 0,03
590	498	32	13,5	12	37	≥ 0 to 0,03
690	598	36	13,5	12	44	≥ 0 to 0,04
790	698	40	13,5	12	52	≥ 0 to 0,04
890	798	40	13,5	12	60	≥ 0 to 0,05
990	898	44	13,5	12	67	≥ 0 to 0,05
1140	1048	48	13,5	12	77	≥ 0 to 0,06

- $n_1 = 4$ Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

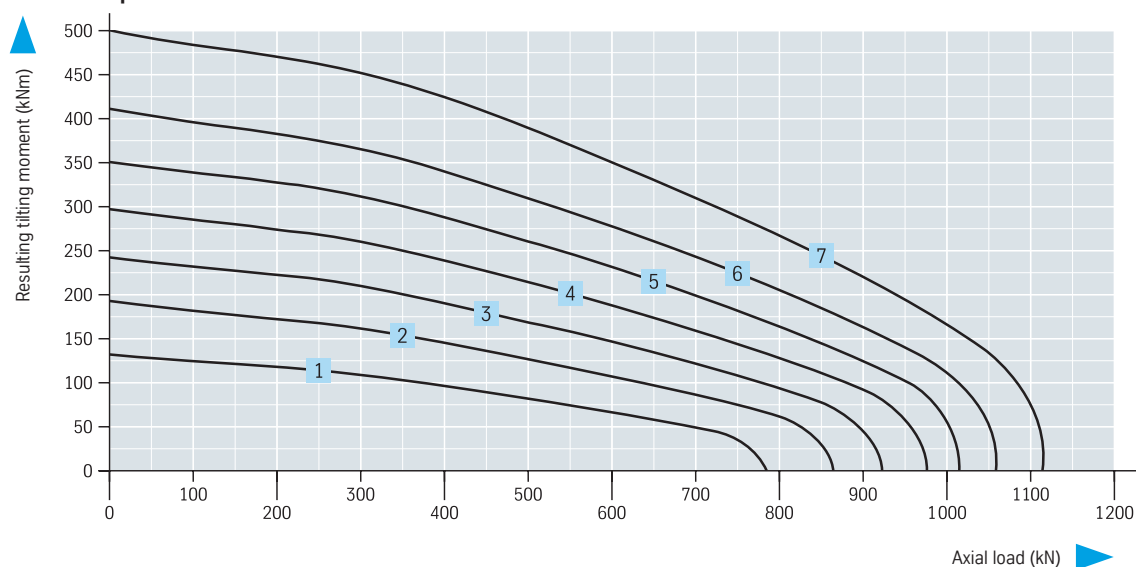
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 621, Bearing with restricted play

Bearing with external gearing		Geometry									
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	061.20.0414.575.01.1403	414	504,0	343,5 + 0,09	56	412,5	417 + 0,10	45,5	45,5	10,5	10,5
2	061.20.0544.575.01.1403	544	640,8	473,5 + 0,10	56	542,5	547 + 0,11	45,5	45,5	10,5	10,5
3	061.20.0644.575.01.1403	644	742,8	573,5 + 0,11	56	642,5	647 + 0,13	45,5	45,5	10,5	10,5
4	061.20.0744.575.01.1403	744	838,8	673,5 + 0,13	56	742,5	747 + 0,13	45,5	45,5	10,5	10,5
5	061.20.0844.575.01.1403	844	950,4	773,5 + 0,13	56	842,5	847 + 0,14	45,5	45,5	10,5	10,5
6	061.20.0944.575.01.1403	944	1046,4	873,5 + 0,14	56	942,5	947 + 0,14	45,5	45,5	10,5	10,5
7	061.20.1094.575.01.1403	1094	1198,4	1023,5 + 0,17	56	1092,5	1097 + 0,17	45,5	45,5	10,5	10,5

* Tolerance data
applies in each case to
H₁, H₂

Centering height

H₁ = 10 mm

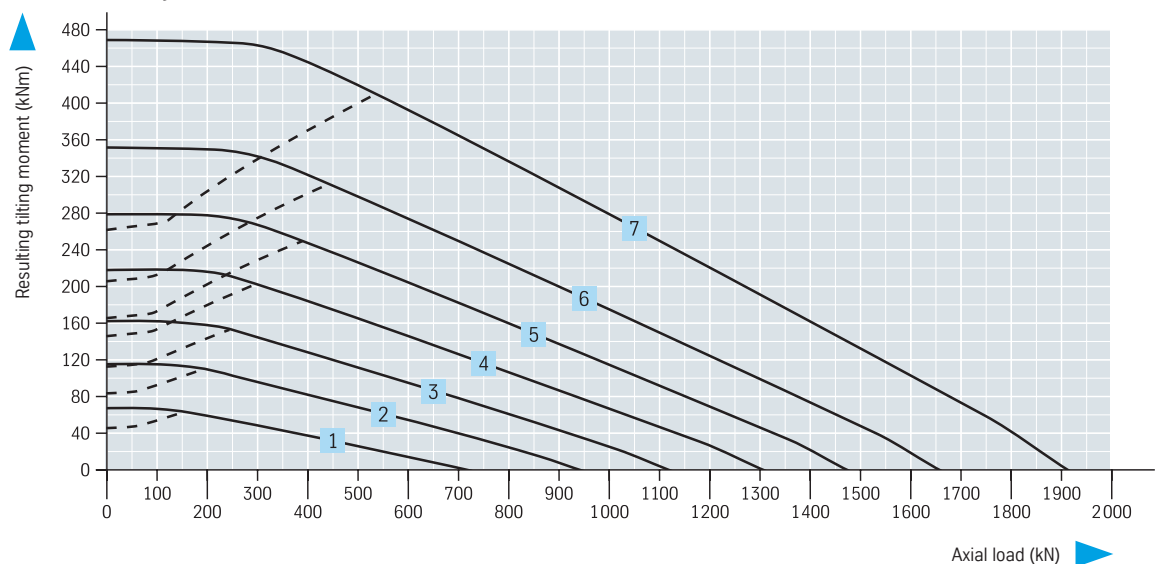
H₂ = 4,5 mm

Centering height
of the companion
structure

max. H₁ -1 mm

max. H₂ -1 mm

Static boundary load curves



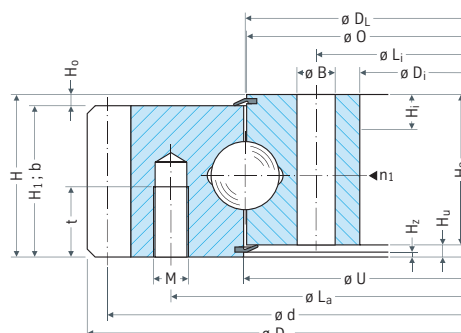
Attachment						Gearing							Miscellaneous	
Ø L _a mm	Ø L _i mm	n L _a / L _i	Ø B mm	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	Y axial + radial mm
455	368	20/24	13,5	12	20	495	5	99	– 0,5	45,5	11,75	23,50	31	≥ 0 to 0,03
585	498	28/32	13,5	12	20	630	6	105	– 0,6	45,5	14,20	28,40	43	≥ 0 to 0,03
685	598	32/36	13,5	12	20	732	6	122	– 0,6	45,5	14,20	28,40	52	≥ 0 to 0,04
785	698	36/40	13,5	12	20	828	6	138	– 0,6	45,5	14,20	28,40	59	≥ 0 to 0,04
885	798	36/40	13,5	12	20	936	8	117	– 0,8	45,5	18,93	37,86	71	≥ 0 to 0,05
985	898	40/44	13,5	12	20	1032	8	129	– 0,8	45,5	18,93	37,86	77	≥ 0 to 0,05
1135	1048	44/48	13,5	12	20	1184	8	148	– 0,8	45,5	18,93	37,86	91	≥ 0 to 0,06

- n_1 = 4 Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

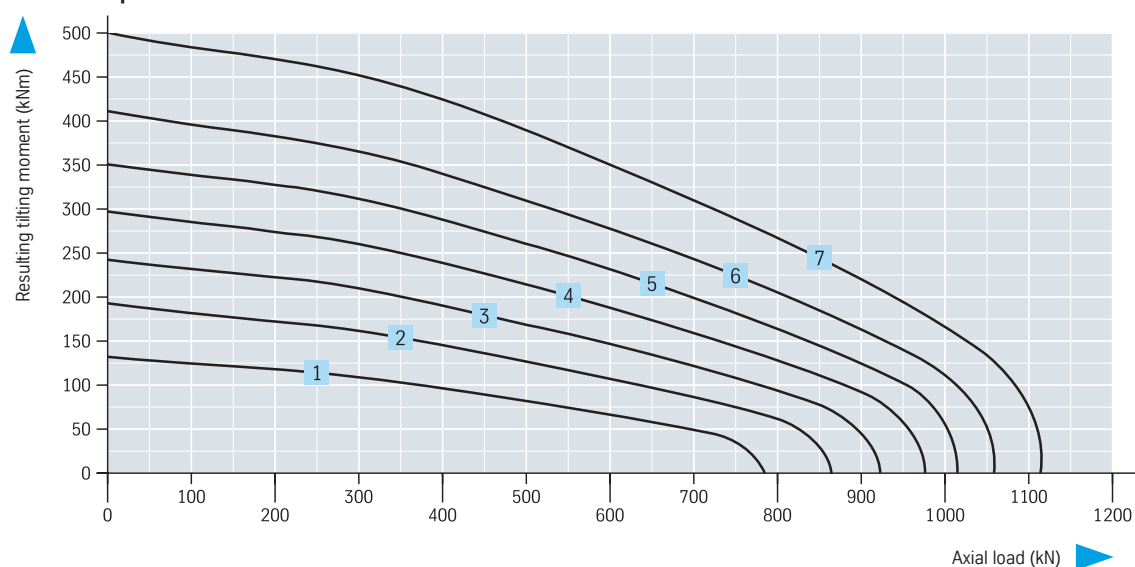
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 621, Bearing with restricted play

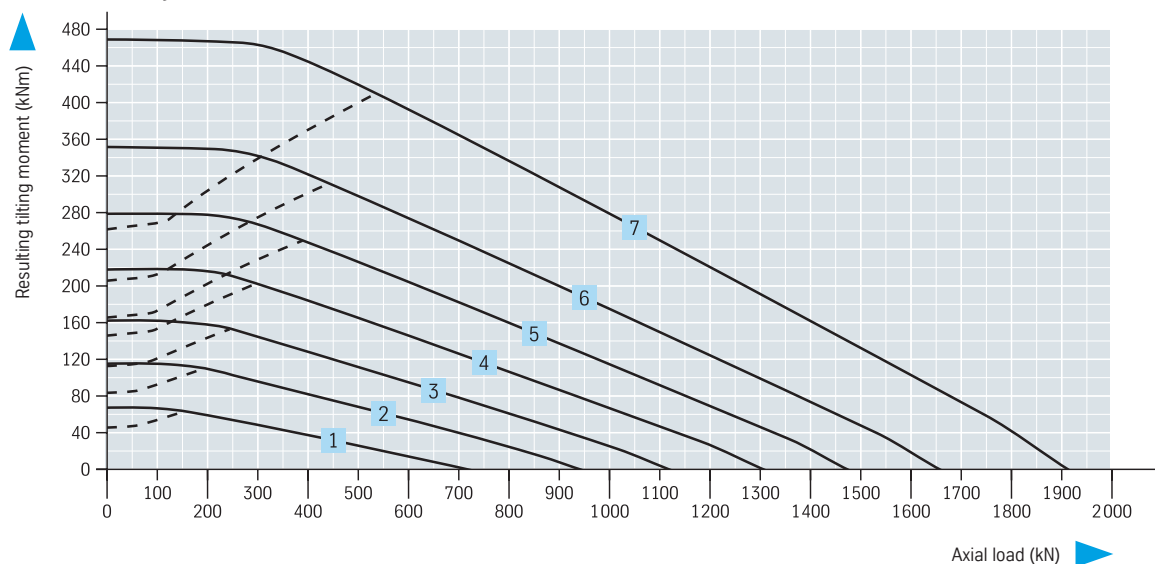
Bearing with internal gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	062.20.0414.575.01.1403	414	484,5 -0,10	326,5	56	415,5	411 -0,10	45,5	45,5	10,5	10,5
2	062.20.0544.575.01.1403	544	614,5 -0,11	445,2	56	545,5	541 -0,11	45,5	45,5	10,5	10,5
3	062.20.0644.575.01.1403	644	714,5 -0,13	547,2	56	645,5	641 -0,13	45,5	45,5	10,5	10,5
4	062.20.0744.575.01.1403	744	814,5 -0,14	649,2	56	745,5	741 -0,13	45,5	45,5	10,5	10,5
5	062.20.0844.575.01.1403	844	914,5 -0,14	737,6	56	845,5	841 -0,14	45,5	45,5	10,5	10,5
6	062.20.0944.575.01.1403	944	1014,5 -0,17	841,6	56	945,5	941 -0,14	45,5	45,5	10,5	10,5
7	062.20.1094.575.01.1403	1094	1164,5 -0,17	985,6	56	1095,5	1091 -0,17	45,5	45,5	10,5	10,5

* Tolerance data
applies in each case to
H_A, H_Z

Centering height
H_Z = 4,5 mm
H_A = 10 mm

Centering height
of the companion
structure
max. H_Z -1 mm
max. H_A -1 mm

Static boundary load curves



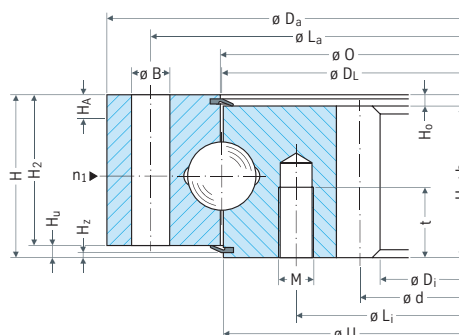
Attachment						Gearing							Miscellaneous	
$\emptyset L_a$ mm	$\emptyset L_i$ mm	n	$\emptyset B$ mm	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	kg	Y axial + radial mm
460	375	24	13,5	12	20	335	5	67	- 0,75	45,5	13,54	27,08	31	≥ 0 to 0,03
590	505	32	13,5	12	20	456	6	76	- 0,60	45,5	16,00	32,00	42	≥ 0 to 0,03
690	605	36	13,5	12	20	558	6	93	- 0,60	45,5	15,62	31,24	50	≥ 0 to 0,04
790	705	40	13,5	12	20	660	6	110	- 0,60	45,5	15,32	30,64	58	≥ 0 to 0,04
890	805	40	13,5	12	20	752	8	94	- 0,80	45,5	20,80	41,60	69	≥ 0 to 0,05
990	905	44	13,5	12	20	856	8	107	- 0,80	45,5	20,49	40,98	76	≥ 0 to 0,05
1140	1055	48	13,5	12	20	1000	8	125	- 0,80	45,5	20,16	40,32	91	≥ 0 to 0,06

► n_1 = 4 Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

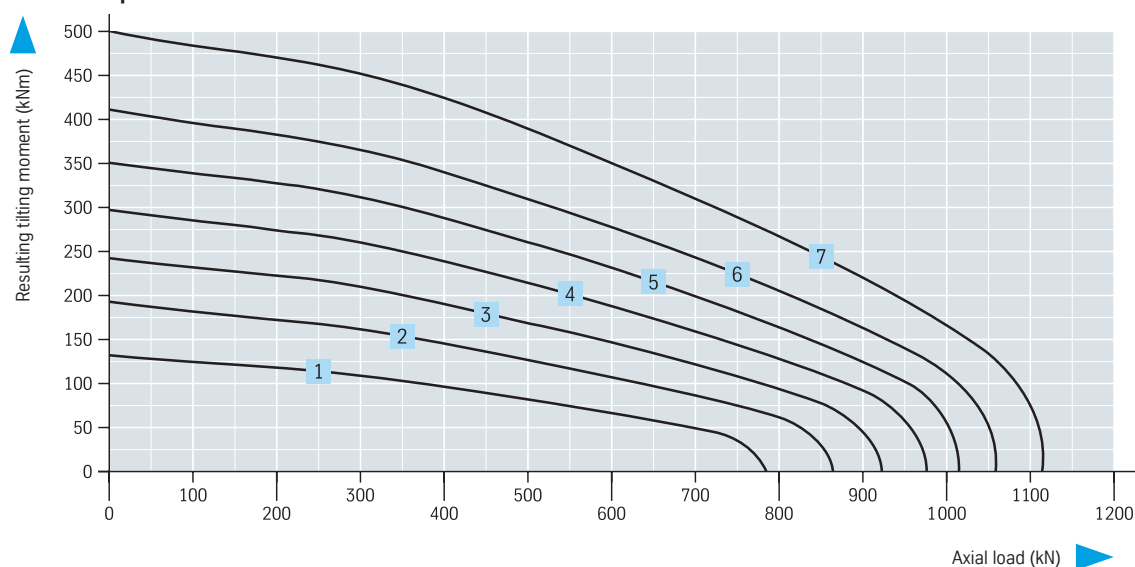
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Normal bearing

Bearing without gearing		Geometry											
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm	$\varnothing D_a^*$ mm	$\varnothing D_i^*$ mm
1	060.25.0855.500.11.1503	855	955	755	63	856	854	54	54	9	9	953 - 0,23	757 + 0,23
2	060.25.0955.500.11.1503	955	1055	855	63	956	954	54	54	9	9	1053 - 0,26	857 + 0,23
3	060.25.1055.500.11.1503	1055	1155	955	63	1056	1054	54	54	9	9	1153 - 0,26	957 + 0,23
4	060.25.1155.500.11.1503	1155	1255	1055	63	1156	1154	54	54	9	9	1253 - 0,31	1057 + 0,26
5	060.25.1255.500.11.1503	1255	1355	1155	63	1256	1254	54	54	9	9	1353 - 0,31	1157 + 0,26
6	060.25.1355.500.11.1503	1355	1455	1255	63	1356	1354	54	54	9	9	1453 - 0,31	1257 + 0,26
7	060.25.1455.500.11.1503	1455	1555	1355	63	1456	1454	54	54	9	9	1553 - 0,31	1357 + 0,26

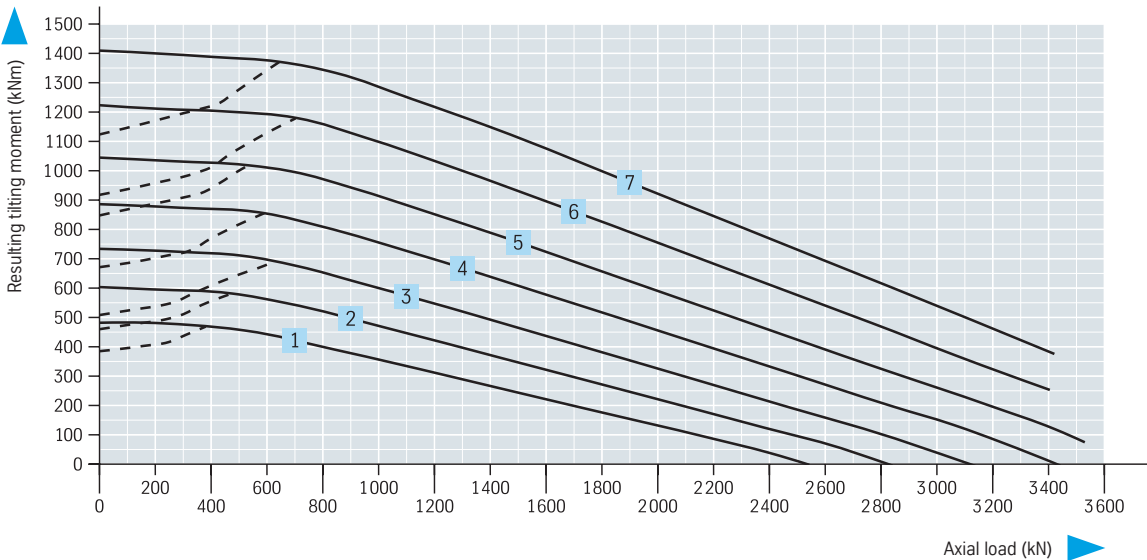
If centring spigots are required on the indicated diameters D_a^* or D_i^* these must be specified when the order is placed.

*Tolerance data applies in each case to H_r , H_A

Centering height
 $H_i = 10\text{ mm}$
 $H_A = 10\text{ mm}$

Centering height
of the companion
structure
max. 9 mm

Static boundary load curves



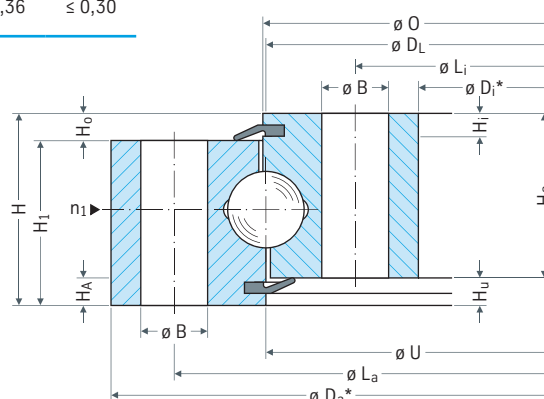
Attachment					Miscellaneous			
$\emptyset L_a$ mm	$\emptyset L_i$ mm	n	$\emptyset B$ mm	M mm	 kg	n_1	Y axial mm	Y radial mm
915	795	28	22	20	100	4	$\leq 0,30$	$\leq 0,25$
1015	895	30	22	20	113	6	$\leq 0,30$	$\leq 0,25$
1115	995	30	22	20	124	6	$\leq 0,30$	$\leq 0,25$
1215	1095	36	22	20	139	6	$\leq 0,30$	$\leq 0,25$
1315	1195	42	22	20	148	6	$\leq 0,36$	$\leq 0,30$
1415	1295	42	22	20	161	6	$\leq 0,36$	$\leq 0,30$
1515	1395	48	22	20	171	6	$\leq 0,36$	$\leq 0,30$

► n_1 = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

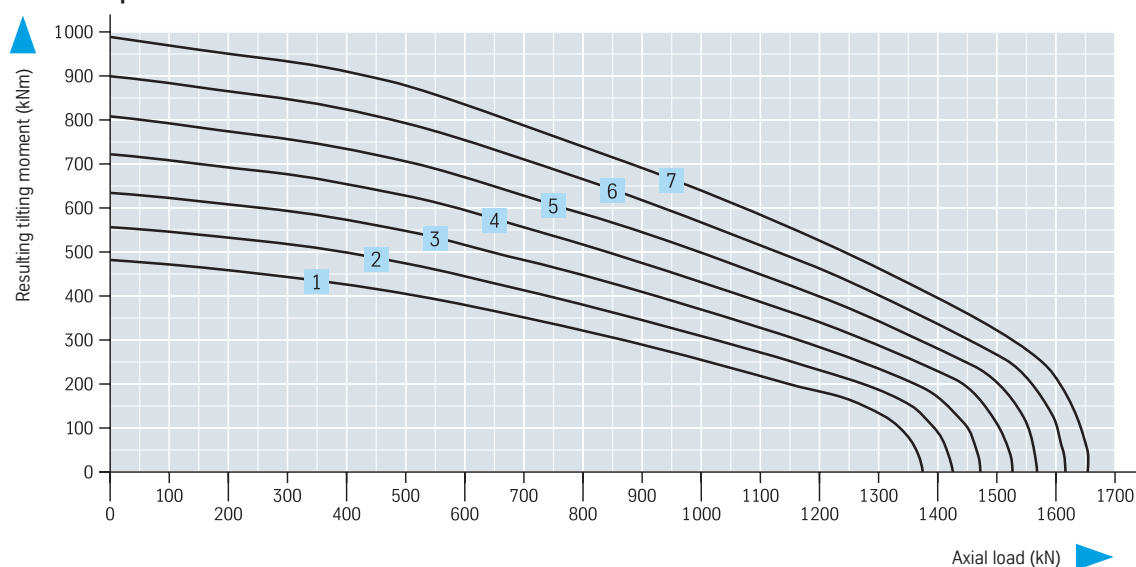
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Normal bearing

Bearing with external gearing		Geometry											
Drawing number		$\emptyset D_L$ mm	$\emptyset D_a$ mm	$\emptyset D_i$ mm	H mm	$\emptyset O$ mm	$\emptyset U$ mm	H_1 mm	H_2 mm	H_u mm	H_o mm	$\emptyset D_i^*$ mm	$\emptyset U^*$ mm
1	061.25.0855.500.11.1503	855	997,2	755	80	856	854	71	54	26	9	757 + 0,23	855 + 0,23
2	061.25.0955.500.11.1503	955	1096,2	855	80	956	954	71	54	26	9	857 + 0,23	955 + 0,23
3	061.25.1055.500.11.1503	1055	1198	955	80	1056	1054	71	54	26	9	957 + 0,23	1055 + 0,26
4	061.25.1155.500.11.1503	1155	1298	1055	80	1156	1154	71	54	26	9	1057 + 0,26	1155 + 0,26
5	061.25.1255.500.11.1503	1255	1398	1155	80	1256	1254	71	54	26	9	1157 + 0,26	1255 + 0,31
6	061.25.1355.500.11.1503	1355	1498	1255	80	1356	1354	71	54	26	9	1257 + 0,26	1355 + 0,31
7	061.25.1455.500.11.1503	1455	1598	1355	80	1456	1454	71	54	26	9	1357 + 0,26	1455 + 0,31

If centring spigots are required on the indicated diameters D_a^* or D_i^* these must be specified when the order is placed.

*Tolerance data applies in each case to H_r , H_A

Centering height

$H_i = 10$ mm

$H_z = 10$ mm

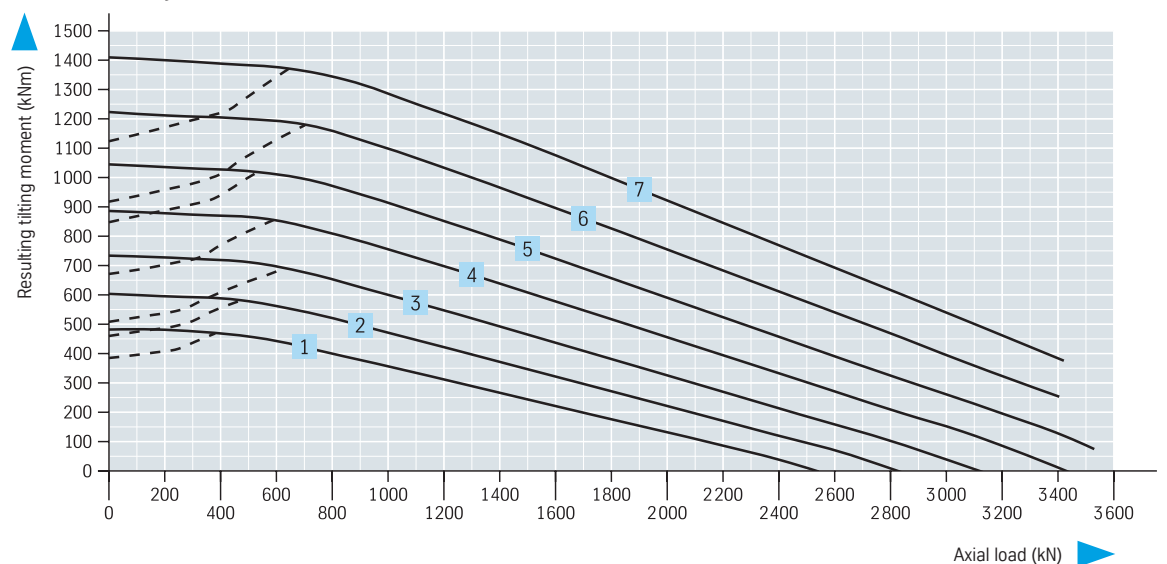
Centering height

of the companion

structure

max. 9 mm

Static boundary load curves



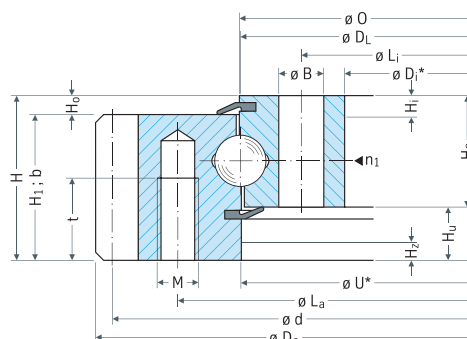
Attachment						Gearing							Miscellaneous			
$\varnothing L_a$ mm	$\varnothing L_i$ mm	n	$\varnothing B$ mm	M mm	t mm	d mm	m mm	z	k · m mm	b _{min} mm	X1 kN	X2 kN	 kg	n ₁	Y axial mm	Y radia mm
916	795	28	22	20	40	981	9	109	− 0,9	70	32,76	65,52	141	4	≤ 0,30	≤ 0,25
1016	895	30	22	20	40	1080	9	120	− 0,9	70	32,76	65,52	158	6	≤ 0,30	≤ 0,25
1116	995	30	22	20	40	1180	10	118	− 1,0	70	36,40	72,80	172	6	≤ 0,30	≤ 0,25
1216	1095	36	22	20	40	1280	10	128	− 1,0	70	36,40	72,80	190	6	≤ 0,30	≤ 0,25
1316	1195	42	22	20	40	1380	10	138	− 1,0	70	36,40	72,80	204	6	≤ 0,36	≤ 0,30
1416	1295	42	22	20	40	1480	10	148	− 1,0	70	36,40	72,80	222	6	≤ 0,36	≤ 0,30
1516	1395	48	22	20	40	1580	10	158	− 1,0	70	36,40	72,80	236	6	≤ 0,36	≤ 0,30

► n₁ = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

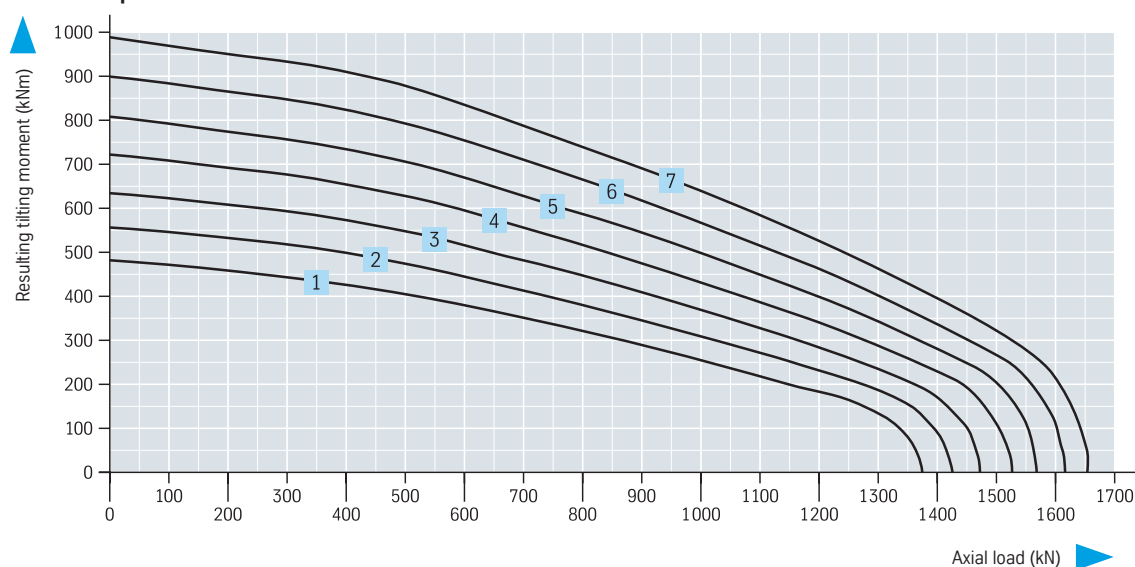
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Normal bearing

Bearing with internal gearing		Geometry											
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm	$\varnothing D_a^*$ mm	$\varnothing U^*$ mm
1	062.25.0855.500.11.1503	855	955	710	80	854	856	71	54	26	9	953 - 0,23	855 - 0,23
2	062.25.0955.500.11.1503	955	1055	810	80	954	956	71	54	26	9	1053 - 0,26	955 - 0,23
3	062.25.1055.500.11.1503	1055	1155	910	80	1054	1056	71	54	26	9	1153 - 0,26	1055 - 0,26
4	062.25.1155.500.11.1503	1155	1255	1010	80	1154	1156	71	54	26	9	1253 - 0,31	1155 - 0,26
5	062.25.1255.500.11.1503	1255	1355	1110	80	1254	1256	71	54	26	9	1353 - 0,31	1255 - 0,31
6	062.25.1355.500.11.1503	1355	1455	1210	80	1354	1356	71	54	26	9	1453 - 0,31	1355 - 0,31
7	062.25.1455.500.11.1503	1455	1555	1310	80	1454	1456	71	54	26	9	1553 - 0,31	1455 - 0,31

If centring spigots are required on the indicated diameters D_a^* or D_i^* these must be specified when the order is placed.

*Tolerance data applies in each case to H_r , H_A

Centering height

$H_z = 10 \text{ mm}$

$H_A = 10 \text{ mm}$

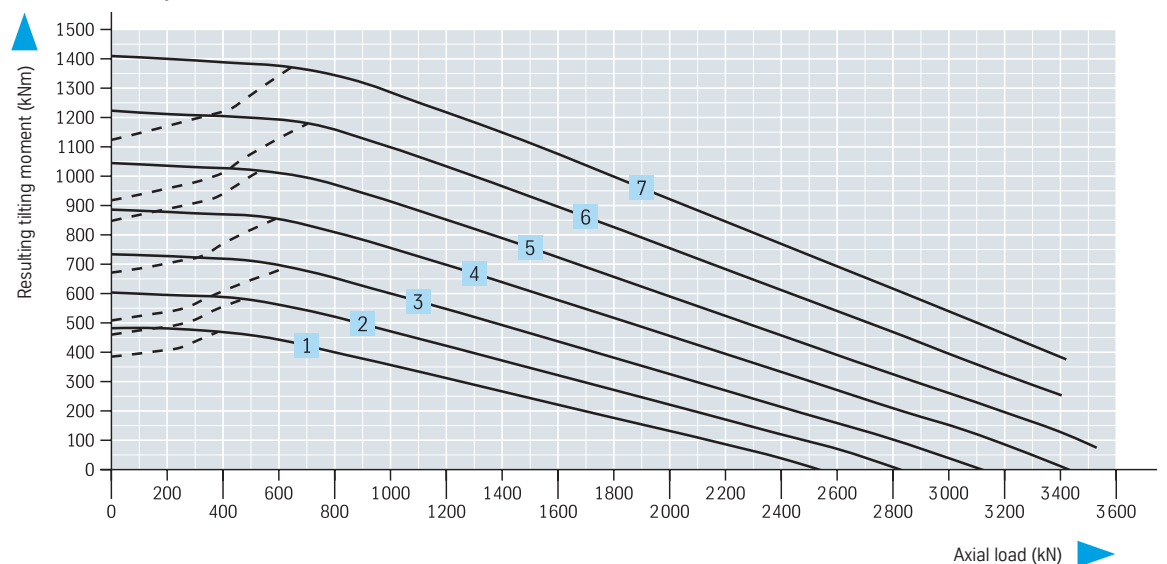
Centering height

of the companion

structure

max. 9 mm

Static boundary load curves



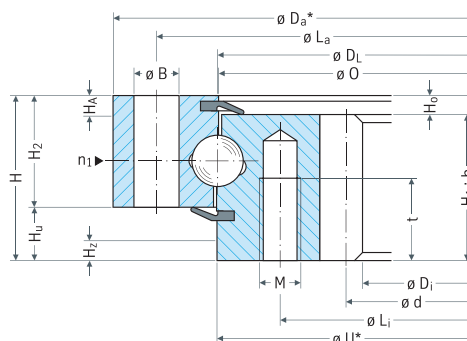
Attachment						Gearing						Miscellaneous			
$\emptyset L_a$ mm	$\emptyset L_l$ mm	n	$\emptyset B$ mm	M mm	t mm	d mm	m mm	z	b_{min} mm	X1 kN	X2 kN	 kg	n_1	Y axial mm	Y radial mm
915	794	28	22	20	40	730	10	73	70	41,23	82,46	133	4	$\leq 0,30$	$\leq 0,25$
1015	894	30	22	20	40	830	10	83	70	40,60	81,20	150	6	$\leq 0,30$	$\leq 0,25$
1115	994	30	22	20	40	930	10	93	70	40,06	80,12	166	6	$\leq 0,30$	$\leq 0,25$
1215	1094	36	22	20	40	1030	10	103	70	39,58	79,16	183	6	$\leq 0,30$	$\leq 0,25$
1315	1194	42	22	20	40	1130	10	113	70	39,18	78,36	198	6	$\leq 0,36$	$\leq 0,30$
1415	1294	42	22	20	40	1230	10	123	70	38,83	77,66	215	6	$\leq 0,36$	$\leq 0,30$
1515	1394	48	22	20	40	1330	10	133	70	38,55	77,10	229	6	$\leq 0,36$	$\leq 0,30$

► n_1 = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

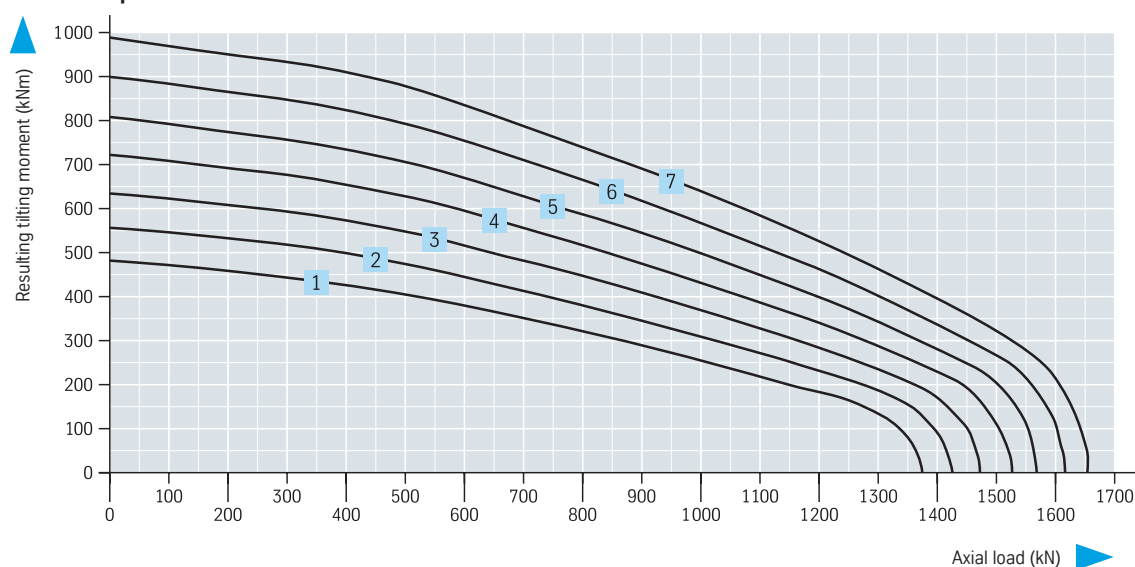
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Bearing with restricted play

Bearing without gearing		Geometry									
Drawing number		Ø D _L mm	Ø D _a mm	Ø D _i mm	H mm	Ø O mm	Ø U mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	060.25.0855.575.11.1403	855	953 − 0,14	757 + 0,14	63	856	854	54	54	9	9
2	060.25.0955.575.11.1403	955	1053 − 0,17	857 + 0,14	63	956	954	54	54	9	9
3	060.25.1055.575.11.1403	1055	1153 − 0,17	957 + 0,14	63	1056	1054	54	54	9	9
4	060.25.1155.575.11.1403	1155	1253 − 0,20	1057 + 0,17	63	1156	1154	54	54	9	9
5	060.25.1255.575.11.1403	1255	1353 − 0,20	1157 + 0,17	63	1256	1254	54	54	9	9
6	060.25.1355.575.11.1403	1355	1453 − 0,20	1257 + 0,20	63	1356	1354	54	54	9	9
7	060.25.1455.575.11.1403	1455	1553 − 0,20	1357 + 0,20	63	1456	1454	54	54	9	9

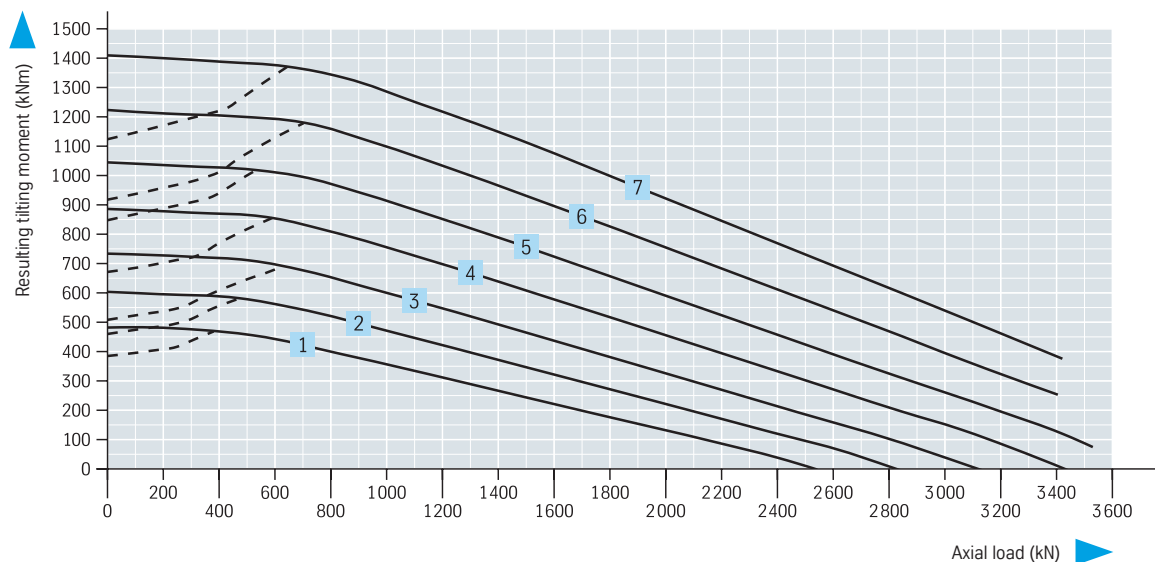
* Tolerance data
applies in each case to
H_i, H_A

Centering height
H_i = 10 mm
H_A = 10 mm

Centering height
of the companion
structure
max. 9 mm

Static boundary load curves

— Race - - - Bolts 10.9



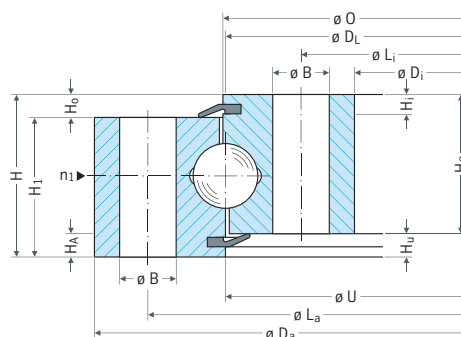
Attachment					Miscellaneous		
$\emptyset L_a$ mm	$\emptyset L_i$ mm	n	$\emptyset B$ mm	M mm	 kg	n_1	Y axial + radial mm
915	795	28	22	20	100	4	≥ 0 to 0,06
1015	895	30	22	20	113	6	≥ 0 to 0,06
1115	995	30	22	20	124	6	≥ 0 to 0,06
1215	1095	36	22	20	139	6	≥ 0 to 0,06
1315	1195	42	22	20	148	6	≥ 0 to 0,07
1415	1295	42	22	20	161	6	≥ 0 to 0,07
1515	1395	48	22	20	171	6	≥ 0 to 0,07

► n_1 = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

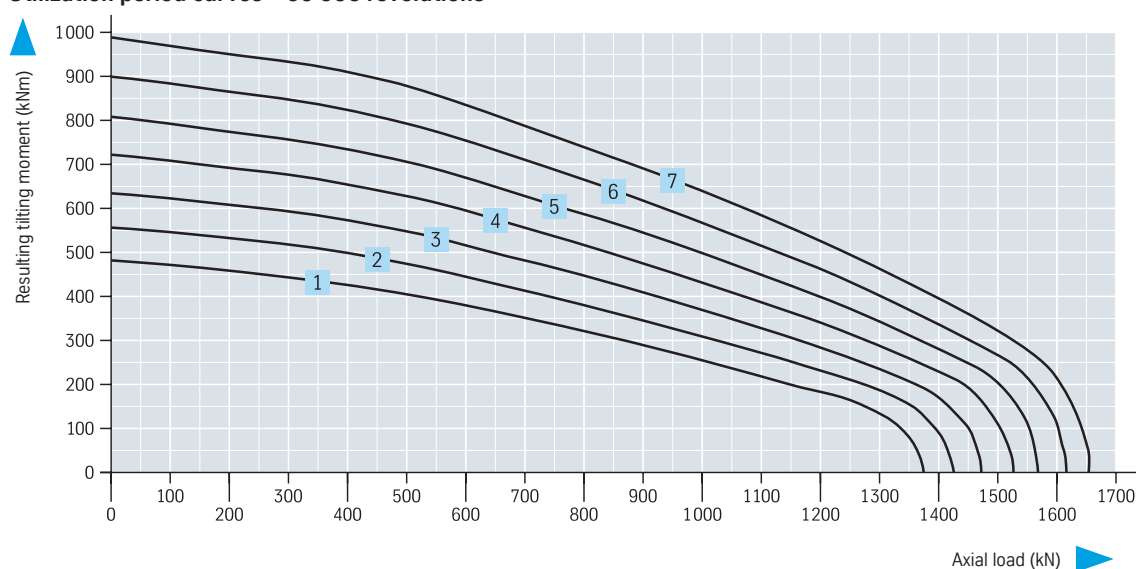
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- $\leq 1000 \text{ mm} \pm 2,5 \text{ mm}$
- $\leq 2000 \text{ mm} \pm 3,5 \text{ mm}$



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Bearing with restricted play

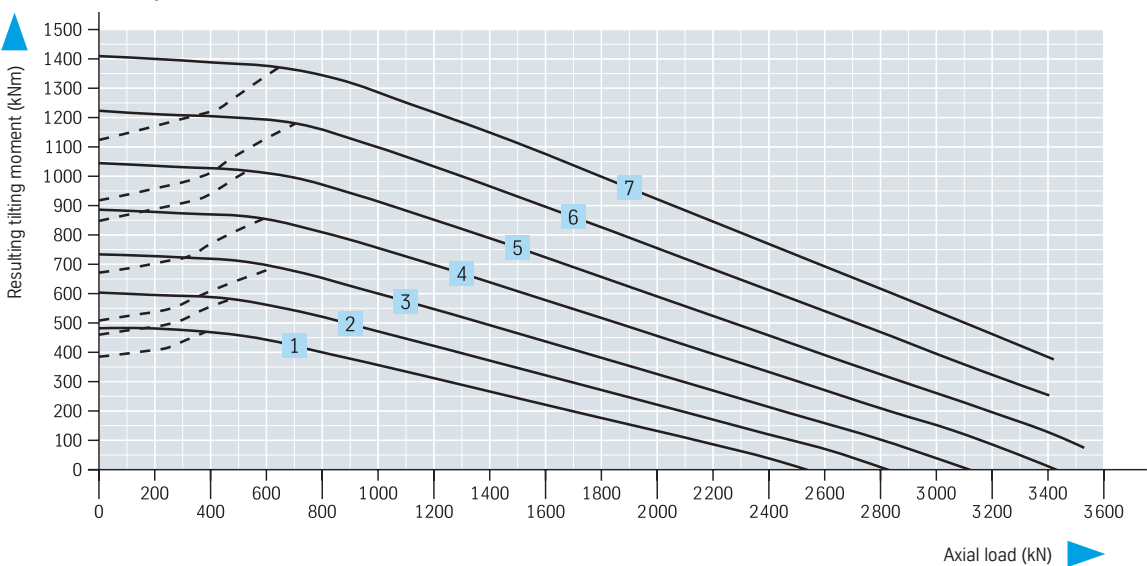
Bearing with external gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_i$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	061.25.0855.575.11.1403	855	997,2	757 + 0,14	80	856	855 + 0,14	71	54	26	9
2	061.25.0955.575.11.1403	955	1096,2	857 + 0,14	80	956	955 + 0,14	71	54	26	9
3	061.25.1055.575.11.1403	1055	1198,0	957 + 0,14	80	1056	1055 + 0,17	71	54	26	9
4	061.25.1155.575.11.1403	1155	1298,0	1057 + 0,17	80	1156	1155 + 0,17	71	54	26	9
5	061.25.1255.575.11.1403	1255	1398,0	1157 + 0,17	80	1256	1255 + 0,20	71	54	26	9
6	061.25.1355.575.11.1403	1355	1498,0	1257 + 0,20	80	1356	1355 + 0,20	71	54	26	9
7	061.25.1455.575.11.1403	1455	1598,0	1357 + 0,20	80	1456	1455 + 0,20	71	54	26	9

* Tolerance data
applies in each case to
H₁, H₂

Centering height
H₁ = 10 mm
H₂ = 10 mm

Centering height
of the companion
structure
max. 9 mm

Static boundary load curves



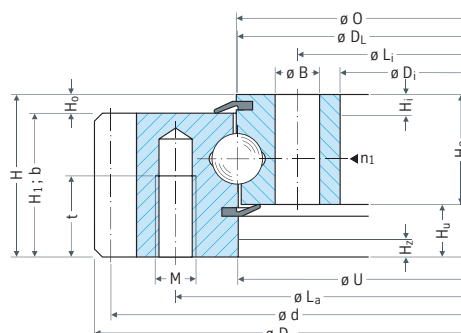
Attachment						Gearing							Miscellaneous		
Ø L _a mm	Ø L _i mm	n	Ø B mm	M mm	t mm	d mm	m mm	z	k · m mm	b _{min} mm	X1 kN	X2 kN	 kg	n ₁	Y axial + radial mm
916	795	28	22	20	40	981	9	109	– 0,9	70	32,76	65,52	141	4	≥ 0 to 0,06
1016	895	30	22	20	40	1080	9	120	– 0,9	70	32,76	65,52	158	6	≥ 0 to 0,06
1116	995	30	22	20	40	1180	10	118	– 1,0	70	36,40	72,80	172	6	≥ 0 to 0,06
1216	1095	36	22	20	40	1280	10	128	– 1,0	70	36,40	72,80	190	6	≥ 0 to 0,06
1316	1195	42	22	20	40	1380	10	138	– 1,0	70	36,40	72,80	204	6	≥ 0 to 0,07
1416	1295	42	22	20	40	1480	10	148	– 1,0	70	36,40	72,80	222	6	≥ 0 to 0,07
1516	1395	48	22	20	40	1580	10	158	– 1,0	70	36,40	72,80	236	6	≥ 0 to 0,07

► n₁ = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

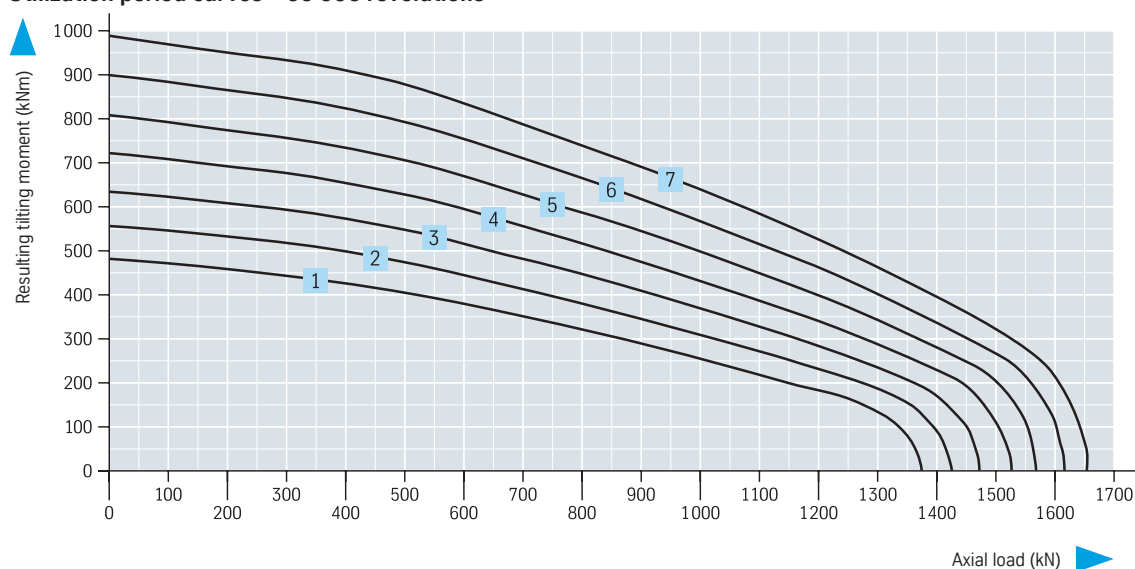
Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions



Series 06 Single-row four-point bearing

Standard Series type 625, Bearing with restricted play

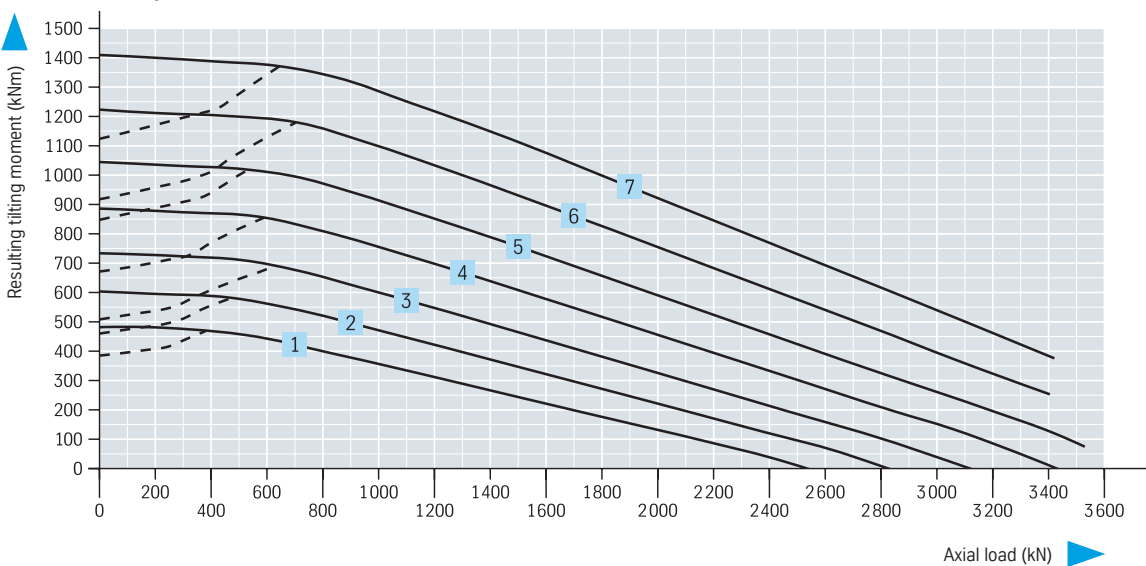
Bearing with internal gearing		Geometry									
Drawing number		$\varnothing D_L$ mm	$\varnothing D_a$ mm	$\varnothing D_I$ mm	H mm	$\varnothing O$ mm	$\varnothing U$ mm	H ₁ mm	H ₂ mm	H _u mm	H _o mm
1	062.25.0855.575.11.1403	855	$\begin{smallmatrix} 953 \\ -0,14 \end{smallmatrix}$	710	80	854	$\begin{smallmatrix} 855 \\ -0,14 \end{smallmatrix}$	71	54	26	9
2	062.25.0955.575.11.1403	955	$\begin{smallmatrix} 1053 \\ -0,17 \end{smallmatrix}$	810	80	954	$\begin{smallmatrix} 955 \\ -0,14 \end{smallmatrix}$	71	54	26	9
3	062.25.1055.575.11.1403	1055	$\begin{smallmatrix} 1153 \\ -0,17 \end{smallmatrix}$	910	80	1054	$\begin{smallmatrix} 1055 \\ -0,17 \end{smallmatrix}$	71	54	26	9
4	062.25.1155.575.11.1403	1155	$\begin{smallmatrix} 1253 \\ -0,20 \end{smallmatrix}$	1010	80	1154	$\begin{smallmatrix} 1155 \\ -0,17 \end{smallmatrix}$	71	54	26	9
5	062.25.1255.575.11.1403	1255	$\begin{smallmatrix} 1353 \\ -0,20 \end{smallmatrix}$	1110	80	1254	$\begin{smallmatrix} 1255 \\ -0,20 \end{smallmatrix}$	71	54	26	9
6	062.25.1355.575.11.1403	1355	$\begin{smallmatrix} 1453 \\ -0,20 \end{smallmatrix}$	1210	80	1354	$\begin{smallmatrix} 1355 \\ -0,20 \end{smallmatrix}$	71	54	26	9
7	062.25.1455.575.11.1403	1455	$\begin{smallmatrix} 1553 \\ -0,20 \end{smallmatrix}$	1310	80	1454	$\begin{smallmatrix} 1455 \\ -0,20 \end{smallmatrix}$	71	54	26	9

* Tolerance data
applies in each case to
H_A, H_Z

Centering height
H_Z = 10 mm
H_A = 10 mm

Centering height
of the companion
structure
max. 9 mm

Static boundary load curves



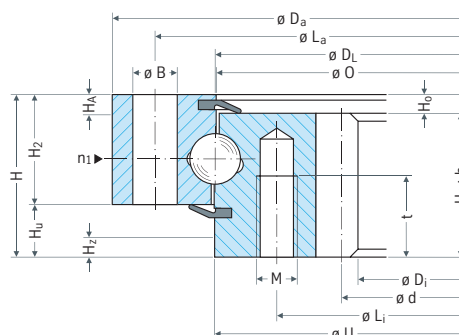
Attachment						Gearing						Miscellaneous		
$\emptyset L_a$ mm	$\emptyset L_i$ mm	n	$\emptyset B$ mm	M mm	t mm	d mm	m mm	z	b_{min} mm	X1 kN	X2 kN	 kg	n_1	Y axial + radial mm
915	794	28	22	20	40	730	10	73	70	41,23	82,46	133	4	≥ 0 to 0,06
1015	894	30	22	20	40	830	10	83	70	40,60	81,20	150	6	≥ 0 to 0,06
1115	994	30	22	20	40	930	10	93	70	40,06	80,12	166	6	≥ 0 to 0,06
1215	1094	36	22	20	40	1030	10	103	70	39,58	79,16	183	6	≥ 0 to 0,06
1315	1194	42	22	20	40	1130	10	113	70	39,18	78,36	198	6	≥ 0 to 0,07
1415	1294	42	22	20	40	1230	10	123	70	38,83	77,66	215	6	≥ 0 to 0,07
1515	1394	48	22	20	40	1330	10	133	70	38,55	77,10	229	6	≥ 0 to 0,07

► n_1 = Tapered grease nipple
AM 10 x 1 DIN 71412
countersunk and
evenly distributed

Diameter tolerances

Machined diameters with untoleranced
drawing dimensions have the following
tolerances:

- ≤ 1000 mm ± 2,5 mm
- ≤ 2000 mm ± 3,5 mm



Bearing
selection series
06

Utilization period curves – 30 000 revolutions

