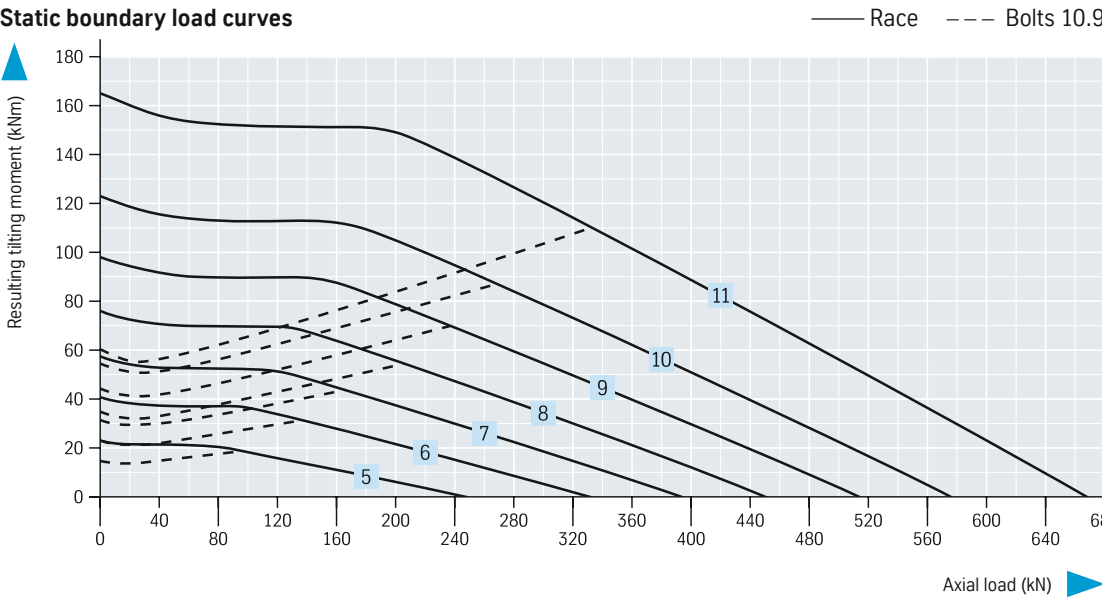


Series 25, 23, 28 profile bearing

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

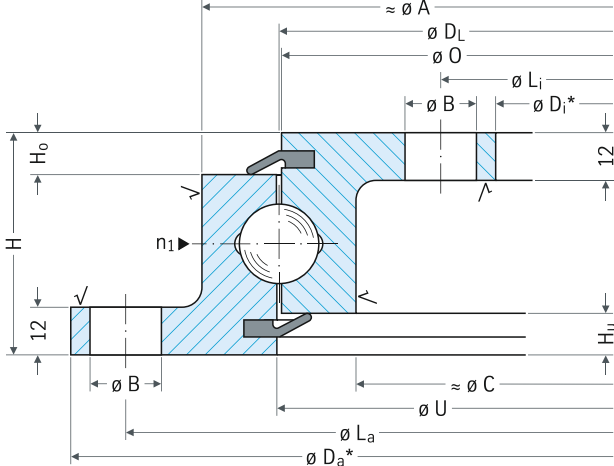
If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.	Dimensions of these centering spigots:		outside	inside	For loads above the bolt boundary load curve with raceway boundary load curve 4 the number of fastening bolts must be doubled.
	Type 21/520 ... 21/650				
	Type 21/750 ... 21/950				
	Type 21/1050 ... 21/1200				
			- 0,5 mm	+ 0,5 mm	
			- 0,6 mm	+ 0,6 mm	
			- 0,7 mm	+ 0,7 mm	



Attachment						Miscellaneous			
Ø L _a mm	n _a	Ø B mm	Ø L _i mm	n _i	Ø B mm	kg	n ₁	Y axial mm	Y radial mm
490	8	18	332	12	18	23,4	4	≤ 0,5	≤ 0,5
620	10	18	462	14	18	31,0	4	≤ 0,5	≤ 0,5
720	12	18	562	16	18	36,4	4	≤ 0,5	≤ 0,5
820	12	18	662	16	18	42,8	4	≤ 0,5	≤ 0,5
920	14	18	762	18	18	47,8	4	≤ 0,5	≤ 0,5
1020	16	18	862	20	18	53,1	4	≤ 0,5	≤ 0,5
1170	16	18	1012	20	18	61,9	4	≤ 0,5	≤ 0,5

► n₁ = 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.
 $\sqrt{\quad} = \sqrt{\text{rolled}}$

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

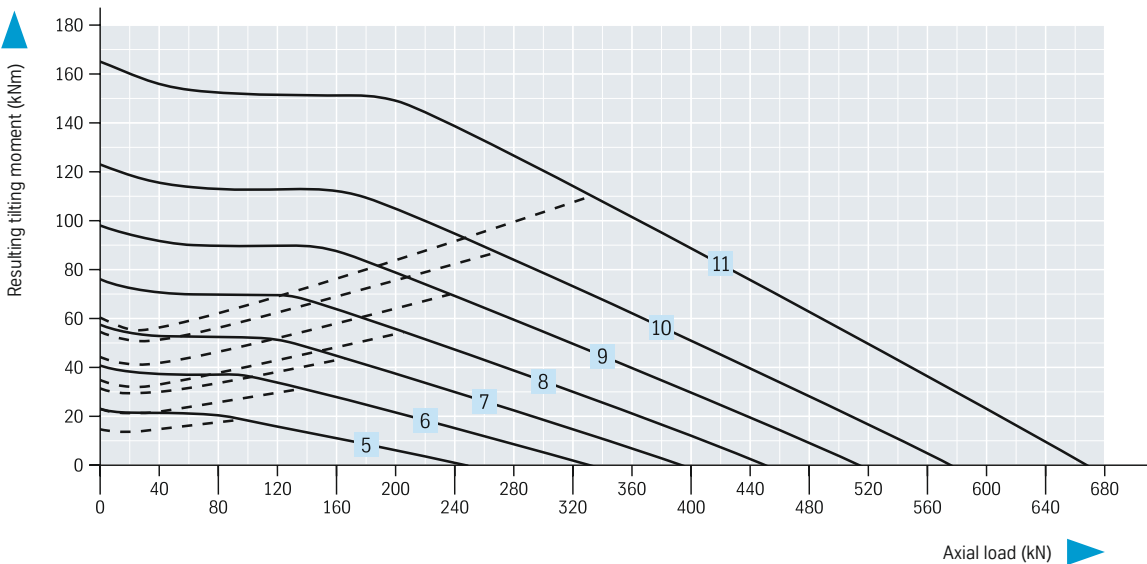
Ø D_a from 1991 tip relief 0,1 · m

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



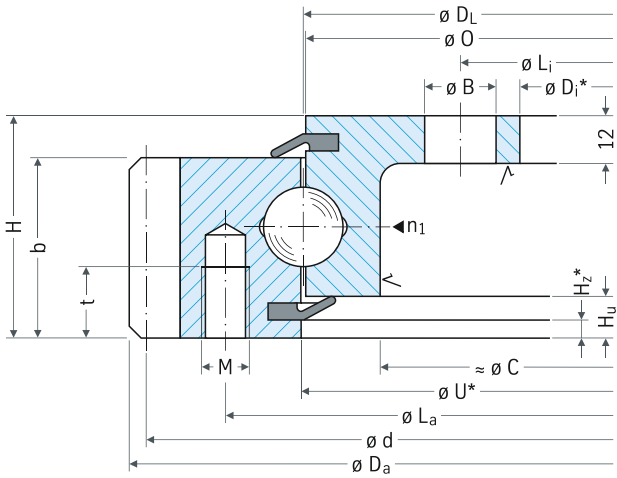
Attachment					Gearing							Miscellaneous			
M mm	t mm	Ø L _i mm	n _i	Ø B mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	n ₁	Y axial mm	Y radial mm
12	20	332	12	18	495	5	99	− 0,5	45,5	11,75	23,50	29,3	4	≤ 0,5	≤ 0,5
12	20	462	14	18	630	6	105	− 0,6	45,5	14,20	28,40	39,5	4	≤ 0,5	≤ 0,5
12	20	562	16	18	732	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

√ = ^{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		$\varnothing D_L$ 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	$\varnothing B$ 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

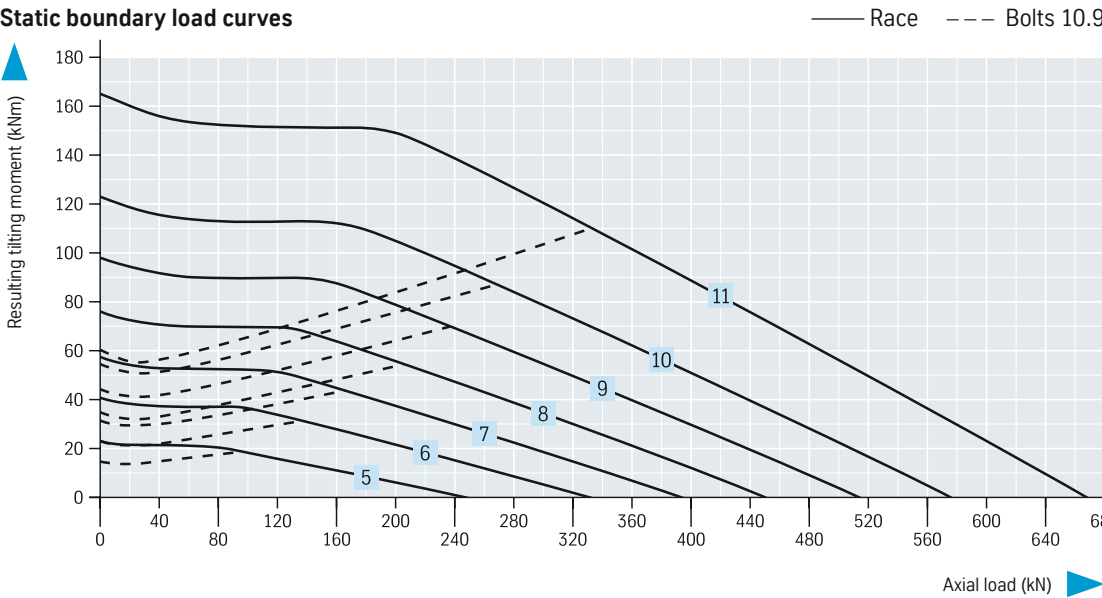
If centering spigots are required for normal bearings, these must be specified when the order is placed. Centering spigots are only possible if * is indicated for the nominal diameter.

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.

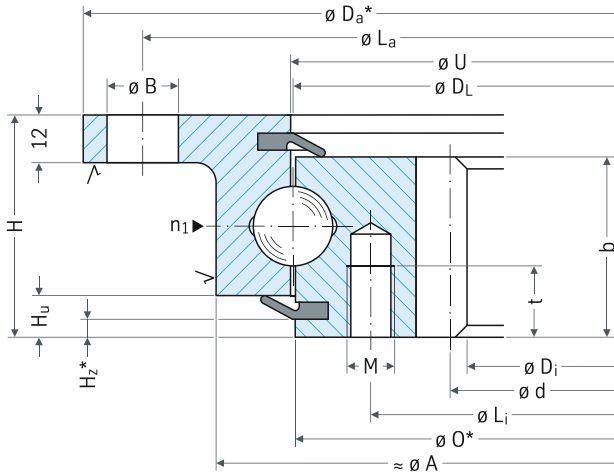


Attachment				Gearing							Miscellaneous			
Ø L _i mm	n _i	M mm	t mm	d mm	m mm	z	k · m mm	b mm	X1 kN	X2 kN	 kg	n ₁	Y axial mm	Y radial mm
375	12	12	20	335	5	67	− 0,75	45,5	13,54	27,08	27,1	4	≤ 0,5	≤ 0,5
505	16	12	20	456	6	76	− 0,60	45,5	16,00	32,00	36,9	4	≤ 0,5	≤ 0,5
605	18	12	20	558	6	93	− 0,60	45,5	15,62	31,24	43,7	4	≤ 0,5	≤ 0,5
705	20	12	20	660	6	110	− 0,60	45,5	15,32	30,64	51,1	4	≤ 0,5	≤ 0,5
805	20	12	20	752	8	94	− 0,80	45,5	20,80	41,60	61,6	4	≤ 0,5	≤ 0,5
905	22	12	20	856	8	107	− 0,80	45,5	20,49	40,98	65,8	4	≤ 0,5	≤ 0,5
1055	24	12	20	1000	8	125	− 0,80	45,5	20,16	40,32	80,7	4	≤ 0,5	≤ 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:
≤ 1000 mm ± 2,5 mm
≤ 2000 mm ± 3,5 mm



Bearing selection series 25, 23, 28