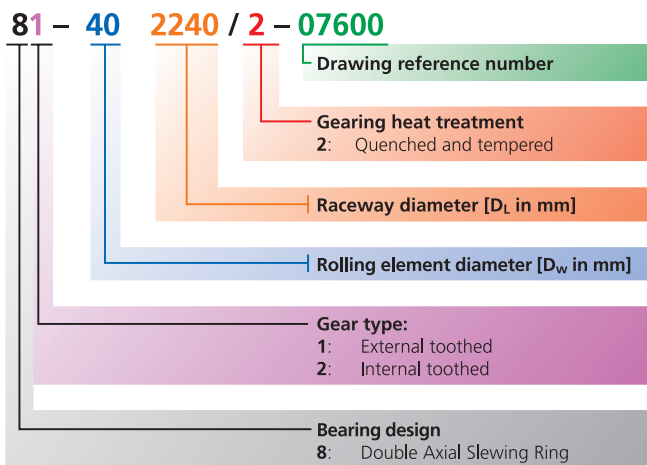
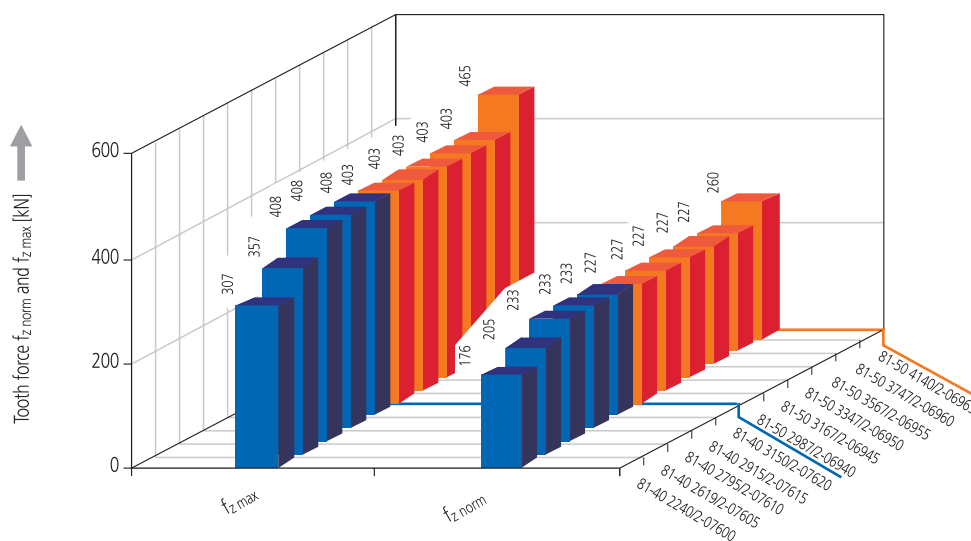


# Series 840, 850

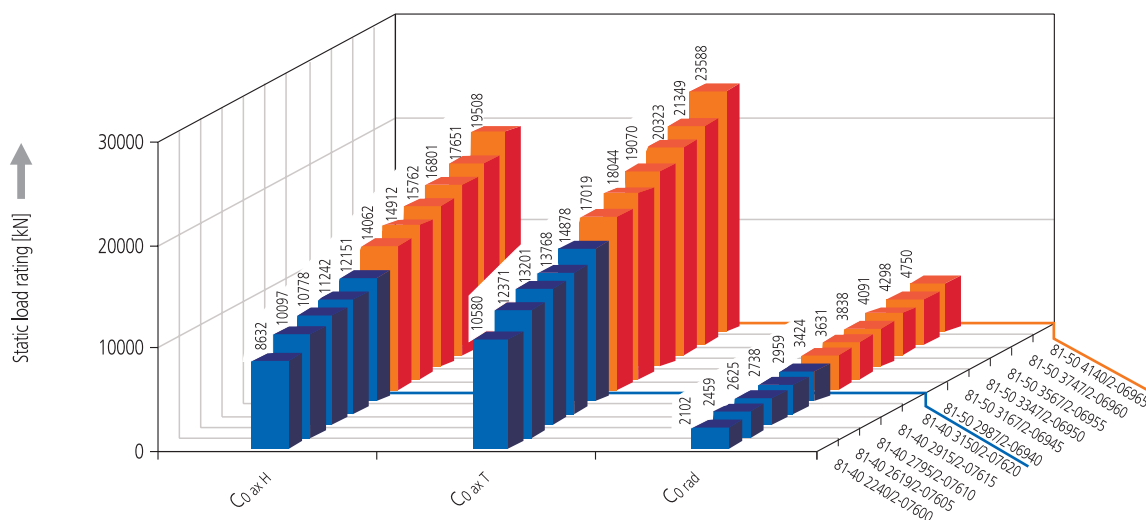
## Series overview - Double Axial Slewing Rings



Permissible tooth force for the individual sizes



Static load ratings for the individual sizes



### Operating conditions

Permissible temperature range -25°C to +70°C  
 Maximum permissible rotational speed  $n_{perm} = 40000 / D_L$   
 ( $D_L$  = raceway diameter)  
 "Compressive" load  
 Bolt grade 10.9

### Typical applications

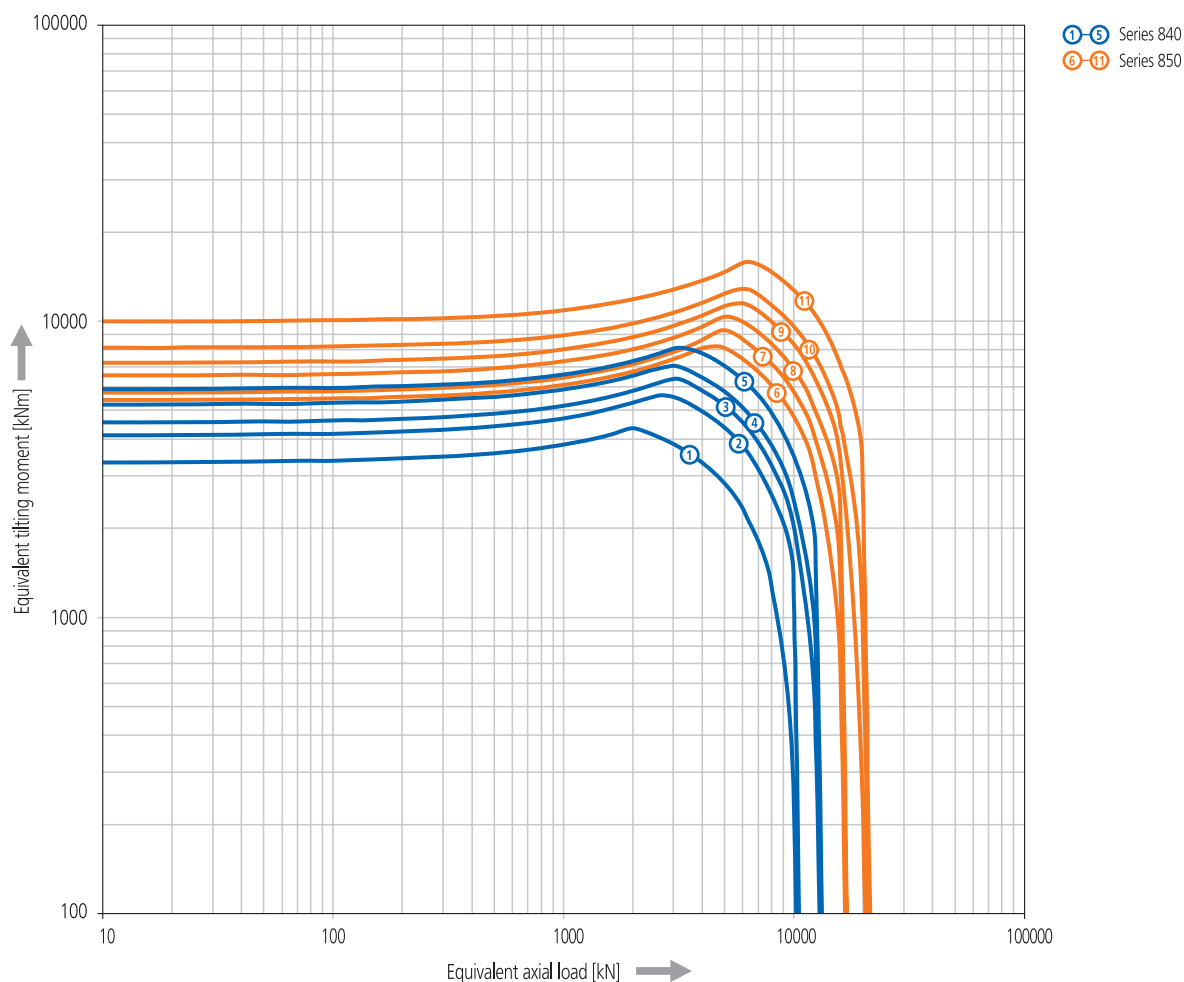
Turntables, slewing mechanisms, bogies, winders, medium-sized to large cranes and construction machinery.  
 Applications such as for Single Row Ball Slewing Rings with higher axial load.

### Characteristics

- Robust design
- Insensitive to rough mounting structure
- Suitable for vibration conditions
- High axial loads can be transmitted

### Limiting load diagrams, series 840, 850

Please refer to the explanations in the Technical Information section of the catalog.



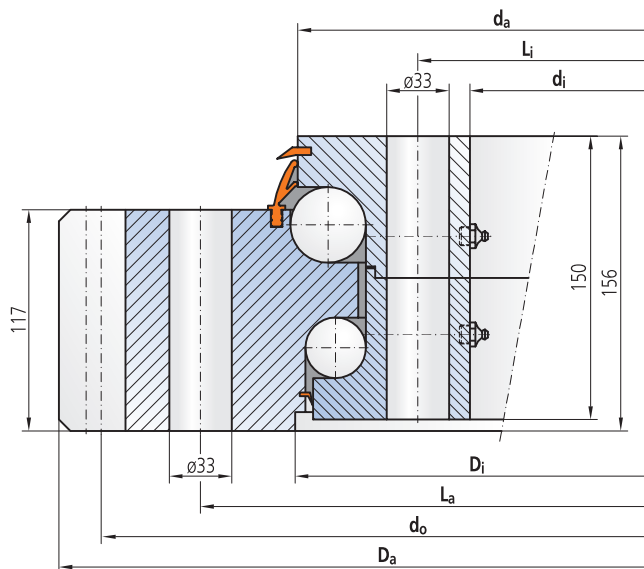
# Series 840 standard design

## External toothed

Drawing number	Position	Dimensions and weight					Mounting holes			Gearing and thooth forces						Load ratings					
		Outside diameter, outer ring	Inside diameter, inner ring	Inside diameter, outer ring	Outside diameter, inner ring	Weight	Pitch circle diameter, outer ring	Pitch circle diameter, inner ring	Number of holes, per pitch circle	Pitch circle diameter	Module	Number of teeth	Addendum modification coeff.	Permissible tooth force	Maximum permissible tooth force	Static			Dynamic		
		$D_a$ [mm]	$d_i$ [mm]	$D_i$ [mm]	$d_a$ [mm]	$G$ [kg]	$L_a$ [mm]	$L_i$ [mm]	$n$ [-]	$d_o$ [mm]	$m$ [mm]	$z2$ [-]	$x2$ [-]	$f_z$ norm [kN]	$f_z$ max [kN]	$C_{o\ rad}$ [kN]	$C_{o\ ax\ T}$ [kN]	$C_{o\ ax\ H}$ [kN]	$C_{rad}$ [kN]	$C_{ax\ T}$ [kN]	$C_{ax\ H}$ [kN]
81-40 2240/2-07600	1	2524.8	2090	2275	2272	1316	2375	2145	48	2480	16	155	+0.50	176	307	2102	10580	8632	536	1265	1007
81-40 2619/2-07605	2	2912.4	2465	2654	2651	1615	2755	2520	52	2862	18	159	+0.50	205	357	2459	12371	10097	568	1341	1067
81-40 2795/2-07610	3	3096.0	2645	2830	2827	1723	2930	2700	54	3040	20	152	+0.50	233	408	2625	13201	10778	580	1375	1091
81-40 2915/2-07615	4	3216.0	2765	2950	2947	1790	3050	2820	60	3160	20	158	+0.50	233	408	2738	13768	11242	590	1399	1109
81-40 3150/2-07620	5	3456.0	3000	3185	3182	1969	3285	3065	60	3400	20	170	+0.50	233	40	2959	14878	12151	607	1436	1141

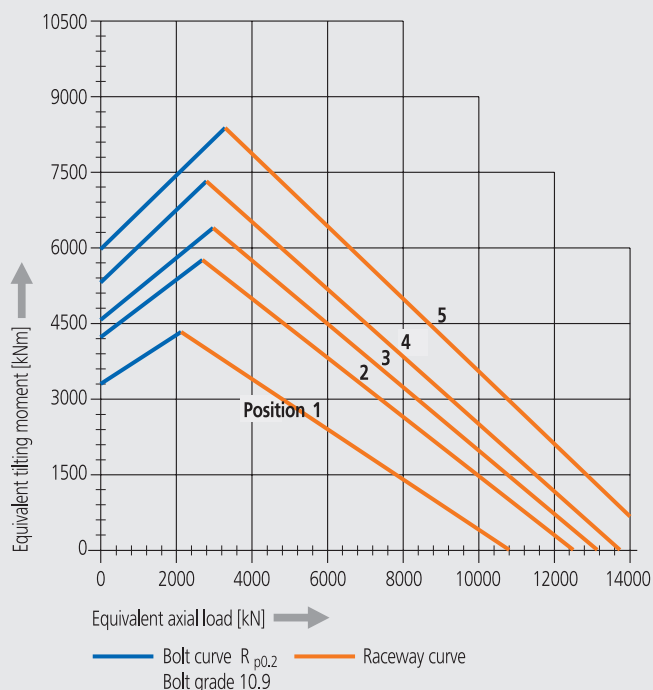
## Internal toothed

Drawing number	Position	Dimensions and weight					Mounting holes			Gearing and thooth forces						Load ratings					
		Outside diameter, outer ring	Inside diameter, inner ring	Inside diameter, outer ring	Outside diameter, inner ring	Weight	Pitch circle diameter, outer ring	Pitch circle diameter, inner ring	Number of holes, per pitch circle	Pitch circle diameter	Module	Number of teeth	Addendum modification coeff.	Permissible tooth force	Maximum permissible tooth force	Static			Dynamic		
		$D_a$ [mm]	$d_i$ [mm]	$D_i$ [mm]	$d_a$ [mm]	$G$ [kg]	$L_a$ [mm]	$L_i$ [mm]	$n$ [-]	$d_o$ [mm]	$m$ [mm]	$z2$ [-]	$x2$ [-]	$f_z$ norm [kN]	$f_z$ max [kN]	$C_{o\ rad}$ [kN]	$C_{o\ ax\ T}$ [kN]	$C_{o\ ax\ H}$ [kN]	$C_{rad}$ [kN]	$C_{ax\ T}$ [kN]	$C_{ax\ H}$ [kN]
82-40 2199/2-07625	1	2350	1920	2168	2164	1238	2295	2065	52	1936	16	121	-0.50	178	338	2078	10387	8535	532	1267	1000
82-40 2622/2-07630	2	2770	2336	2590	2587	1495	2715	2485	60	2352	16	147	-0.50	178	338	2477	12731	10171	568	1345	1068
82-40 2950/2-07635	3	3100	2646	2918	2915	1764	3045	2815	60	2664	18	148	-0.50	214	385	2786	13934	11439	594	1403	1117
82-40 3300/2-07640	4	3450	3006	3268	3265	1935	3395	3165	66	3024	18	168	-0.50	214	385	3115	15587	12793	619	1462	1162

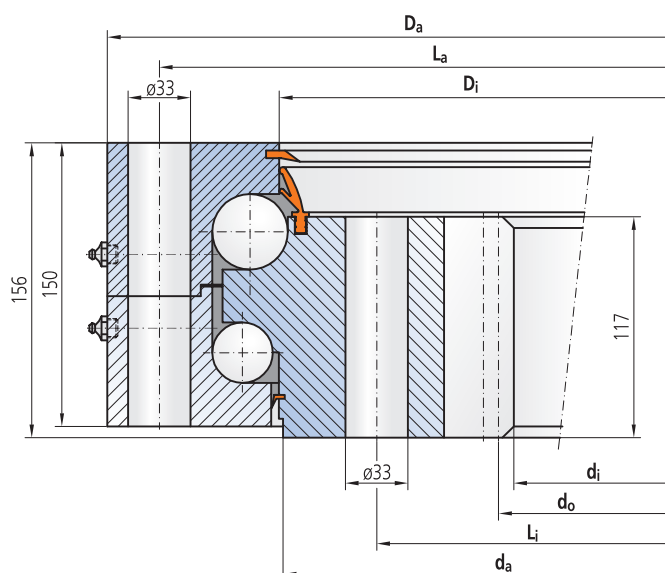


Radial clearance: 0 - 0.4 mm  
 Axial tilting clearance: 0 - 0.4 mm  
 Bearing ring material: 42CrMo4V  
 4 to 6 Taper type grease nipples  
 on each circumferential row

Mounting holes equally spaced  
 Raceway system supplied pre-lubricated  
 Dimensions without tolerances DIN ISO 2768 coarse

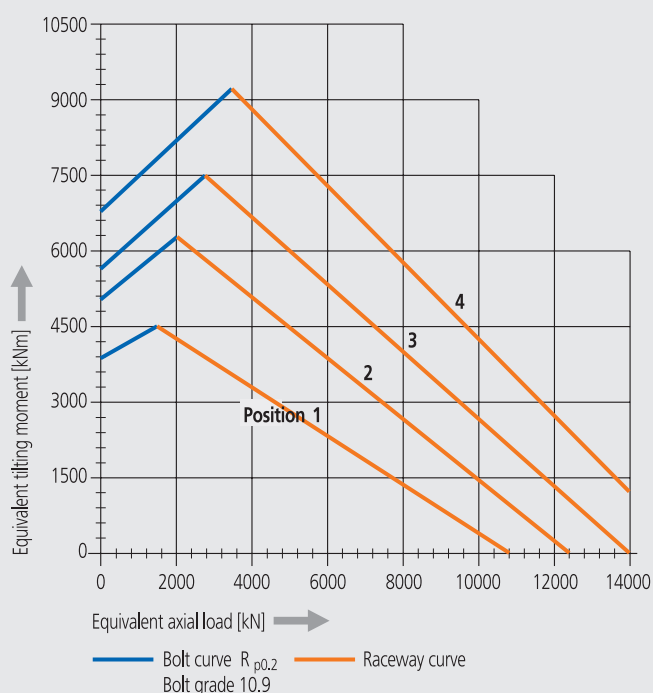


Please adhere strictly to the rules given in the Technical Information section when using above graph!



Radial clearance: 0 - 0.4 mm  
 Axial tilting clearance: 0 - 0.4 mm  
 Bearing ring material: 42CrMo4V  
 4 to 6 Taper type grease nipples  
 on each circumferential row

Mounting holes equally spaced  
 Raceway system supplied pre-lubricated  
 Dimensions without tolerances DIN ISO 2768 coarse



Please adhere strictly to the rules given in the Technical Information section when using above graph!

# Series 850 standard design

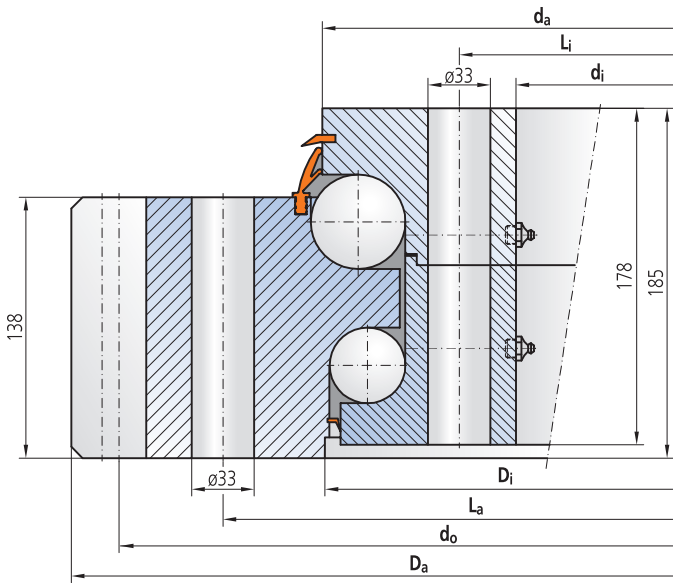
## External toothed

Drawing number	Position	Dimensions and weight					Mounting holes			Gearing and thooth forces						Load ratings					
		Outside diameter, outer ring	Inside diameter, inner ring	Inside diameter, outer ring	Outside diameter, inner ring	Weight	Pitch circle diameter, outer ring	Pitch circle diameter, inner ring	Number of holes, per pitch circle	Pitch circle diameter	Module	Number of teeth	Addendum modification coeff.	Permissible tooth force	Maximum permissible tooth force	Static			Dynamic		
		$D_a$ [mm]	$d_i$ [mm]	$D_i$ [mm]	$d_a$ [mm]	$G$ [kg]	$L_a$ [mm]	$L_i$ [mm]	$n$ [-]	$d_o$ [mm]	$m$ [mm]	$z2$ [-]	$x2$ [-]	$f_z^{norm}$ [kN]	$f_z^{max}$ [kN]	$C_{o rad}$ [kN]	$C_{o ax T}$ [kN]	$C_{o ax H}$ [kN]	$C_{rad}$ [kN]	$C_{ax T}$ [kN]	$C_{ax H}$ [kN]
81-50 2987/2-06940	1	3290.4	2820	3022	3025	2288	3130	2880	66	3240	18	180	+0.50	227	403	3424	17019	14062	749	1774	1408
81-50 3167/2-06945	2	3470.4	3000	3202	3205	2431	3310	3060	66	3420	18	190	+0.50	227	403	3631	18044	14912	766	1810	1439
81-50 3347/2-06950	3	3650.4	3180	3382	3385	2566	3490	3240	72	3600	18	200	+0.50	227	403	3838	19070	15762	782	1853	1469
81-50 3567/2-06955	4	3866.4	3400	3602	3605	2702	3710	3460	78	3816	18	212	+0.50	227	403	4091	20323	16801	799	1892	1502
81-50 3747/2-06960	5	4046.4	3580	3782	3785	2837	3890	3640	84	3996	18	222	+0.50	227	403	4298	21349	17651	814	1932	1530
81-50 4140/2-06965	6	4456.0	3970	4175	4178	3282	4285	4030	90	4400	20	220	+0.50	260	465	4750	23588	19508	844	2002	1587

## Internal toothed

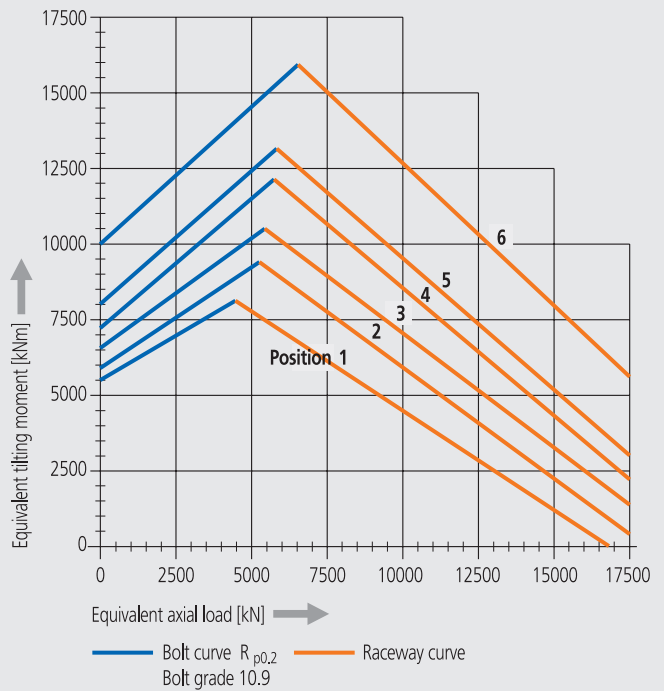
Drawing number	Position	Dimensions and weight					Mounting holes			Gearing and thooth forces						Load ratings					
		Outside diameter, outer ring	Inside diameter, inner ring	Inside diameter, outer ring	Outside diameter, inner ring	Weight	Pitch circle diameter, outer ring	Pitch circle diameter, inner ring	Number of holes, per pitch circle	Pitch circle diameter	Module	Number of teeth	Addendum modification coeff.	Permissible tooth force	Maximum permissible tooth force	Static			Dynamic		
		$D_a$ [mm]	$d_i$ [mm]	$D_i$ [mm]	$d_a$ [mm]	$G$ [kg]	$L_a$ [mm]	$L_i$ [mm]	$n$ [-]	$d_o$ [mm]	$m$ [mm]	$z2$ [-]	$x2$ [-]	$f_z^{norm}$ [kN]	$f_z^{max}$ [kN]	$C_{o rad}$ [kN]	$C_{o ax T}$ [kN]	$C_{o ax H}$ [kN]	$C_{rad}$ [kN]	$C_{ax T}$ [kN]	$C_{ax H}$ [kN]
82-50 2559/2-06970	1	2725	2250	2522	2524	1892	2670	2410	60	2268	18	126	-0.50	240	440	2955	14580	12134	710	1678	1334
82-50 3040/2-06975	2	3205	2720	3002	3005	2295	3150	2890	72	2740	20	137	-0.50	272	495	3508	17321	14406	755	1785	1419
82-50 3520/2-06980	3	3685	3200	3482	3485	2657	3630	3370	78	3220	20	161	-0.50	272	495	4060	20056	16674	798	1888	1501
82-50 3839/2-06985	4	4005	3520	3801	3804	2905	3950	3690	84	3540	20	177	-0.50	272	495	4427	21873	18180	823	1948	1547

Limiting load diagram for "compressive" loads – Series 850

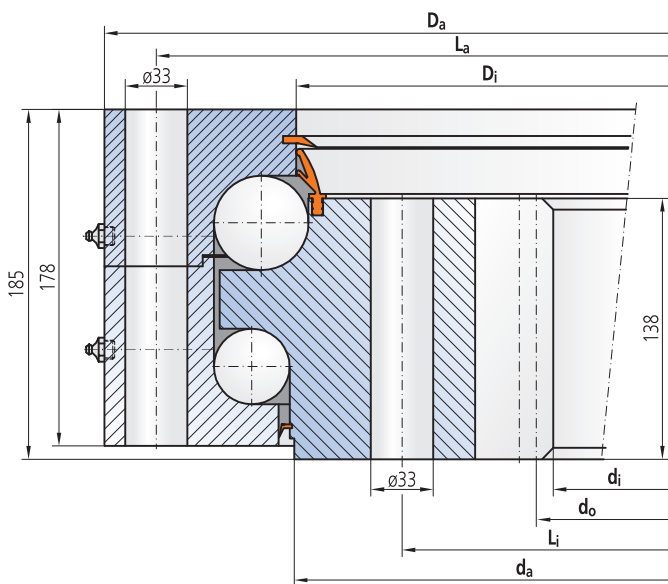


Radial clearance: 0 - 0.5 mm  
 Axial tilting clearance 0 - 0.5 mm  
 Bearing ring material: 42CrMo4V  
 4 to 6 Taper type grease nipples on each circumferential row

Mounting holes equally spaced  
 Raceway system supplied pre-lubricated  
 Dimensions without tolerances DIN ISO 2768 coarse

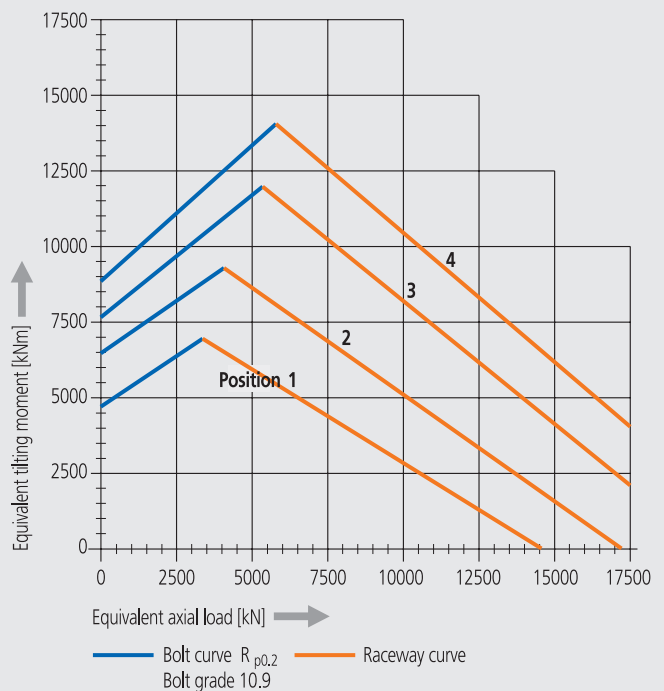


Please adhere strictly to the rules given in the Technical Information section when using above graph!



Radial clearance: 0 - 0.5 mm  
 Axial tilting clearance: 0 - 0.5 mm  
 Bearing ring material: 42CrMo4V  
 4 to 6 Taper type grease nipples on each circumferential row

Mounting holes equally spaced  
 Raceway system supplied pre-lubricated  
 Dimensions without tolerances DIN ISO 2768 coarse



Please adhere strictly to the rules given in the Technical Information section when using above graph!