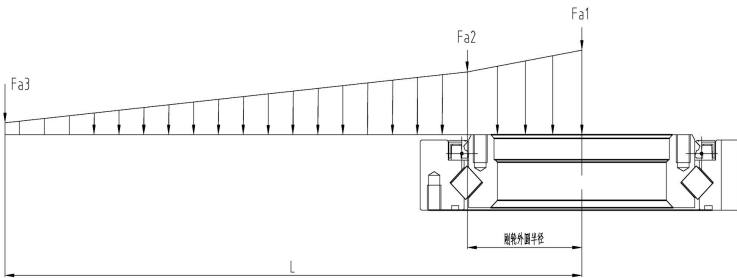


The following axial and radial forces are calculated under the preconditions such as the bearing operating at 20 rpm and a design life of 10,000 hours, and can be used as a reference for design. When the actual operating speed is less than 20 rpm, the maximum axial and radial forces can be appropriately increased for use; conversely, when the speed is greater than 20 rpm, both the maximum bearable axial and radial forces will decrease.

Cap-type crossed roller bearings (KB-HO, KSB-MO, etc.)

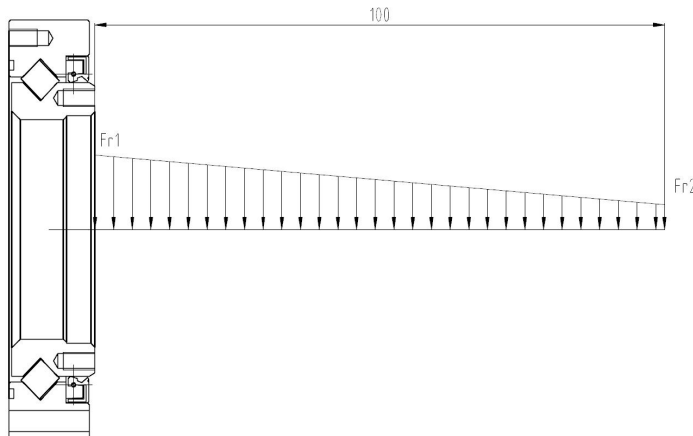
Type	Axial Force				Radial Force		Maximum static torque	Average dynamic torque that can be carried at 20 rpm	Note: The data in the table are only the maximum values when discussing individual forces. If the load is a combined force, the overall bending moment of the load can be directly studied, and the maximum bending moment (instantaneous maximum bending moment) can be calculated as 1.8 times the average bending moment.
	Fa1(max)	Fa2(max)	Fa3(max)	L(m)	Fr1(max)	Fr2(max)			
14	890N	750N	250N	0.125	675N	210N	68Nm	30Nm	
17	1100N	850N	320N	0.13	765N	300N	115Nm	50Nm	
20	1750N	1310N	550N	0.135	968N	480N	162Nm	78Nm	
25	2350N	1910N	910N	0.143	1620N	800N	245Nm	118Nm	
32	4050N	3600N	1600N	0.155	3060N	1500N	540Nm	260Nm	
40	6200N	5500N	3500N	0.166	4600N	3000N	820Nm	410Nm	
45	8550N	7670N	4650N	0.177	6500N	4400N	1110Nm	502Nm	
50	11800N	9880N	6550N	0.195	8340N	6200N	1450Nm	710Nm	

Fa1(max), Fa2(max), and Fa3(max) represent the maximum axial forces that can be borne when the axial force acting points are at different distances from the rotation center of the bearing. The maximum axial force exceeding L_outer can be calculated by the slope between Fa2 and Fa3.



Fa1(max) and Fr2(max) represent the magnitudes of the maximum radial forces that can be borne when the radial force acting points are at different distances from the rotating installation end face of the bearing. The maximum radial force beyond 100mm can be calculated by the slope between Fr1 and Fr2.

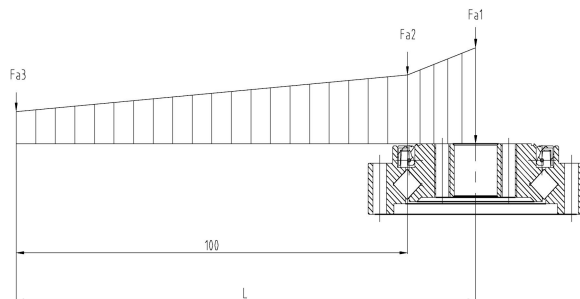
Note: The above maximum radial force temporarily only considers the radial force acting point on the rotation center line. For the radial force acting point not on the rotation center axis, it is recommended to calculate the comprehensive bending moment.



Cup-type crossed roller bearings (KB-MC, etc.)

Type	Axial Force				Radial Force		Maximum static torque	Average dynamic torque that can be carried at 20	Note: The data in the table are only the maximum values when discussing individual forces. If the load is a combined force, the overall bending moment of the load can be directly studied, and the maximum bending moment (instantaneous maximum bending moment) can be calculated as 1.8 times the average bending moment.
	Fa1(max)	Fa2(max)	Fa3(max)	L(m)	Fr1(max)	Fr2(max)			
14	720N	620N	180N	0.12	560N	170N	40Nm	20Nm	
17	900N	760N	250N	0.121	675N	220N	64Nm	30Nm	
20	1050N	810N	300N	0.125	710N	460N	88Nm	42Nm	
25	1650N	1300N	520N	0.131	950N	480N	156Nm	72Nm	
32	3100N	2700N	1320N	0.14	2200N	1210N	305Nm	152Nm	
40	3900N	3240N	1510N	0.148	2880N	1410N	450Nm	220Nm	
45	5800N	4800N	3050N	0.155	3840N	2710N	686Nm	340Nm	
50	6150N	5400N	3410N	0.16	4500N	2890N	750Nm	380Nm	

Fa1(max), Fa2(max), and Fa3(max) represent the maximum axial forces that can be borne when the axial force acting points are at different distances from the rotation center of the bearing. The maximum axial force exceeding L_outer can be calculated by the slope between Fa2 and Fa3.



Fa1(max) and Fr2(max) represent the magnitudes of the maximum radial forces that can be borne when the radial force acting points are at different distances from the rotating installation end face of the bearing. The maximum radial force beyond 100mm can be calculated by the slope between Fr1 and Fr2.

Note: The above maximum radial force temporarily only considers the radial force acting point on the rotation center line. For the radial force acting point not on the rotation center axis, it is recommended to calculate the corresponding bending moment.

