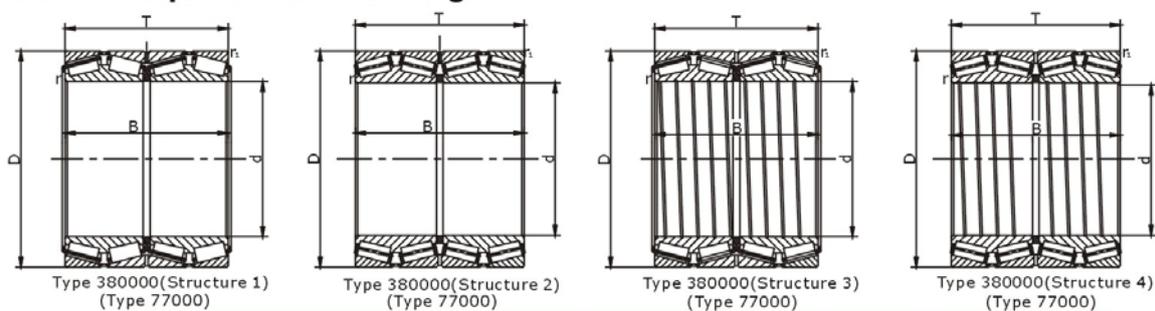# Four–row tapered roller bearings

Four–row tapered roller bearings are the one kind of roll neck bearings,their radial and axial loading capacity are high, can carry heavy axial loads in two directions,and their radial loading capacity is 3 times heavier than singe–row tapered roller bearings, but limiting speed is lower.They can be used as axial locating bearings in two direc–tions because they are able to limit axial displacement in two directions within axial clearance.The radial and axial clearance also can be adjusted by changing the width of spacer between inner and outer rings.

Four–row tapered roller bearings are mainly used in the working roll necks of hot or cold rolling mills, and roll neck of cogging mills.They usually clearance fit with roll necks to being mounted and dismounted conveniently.
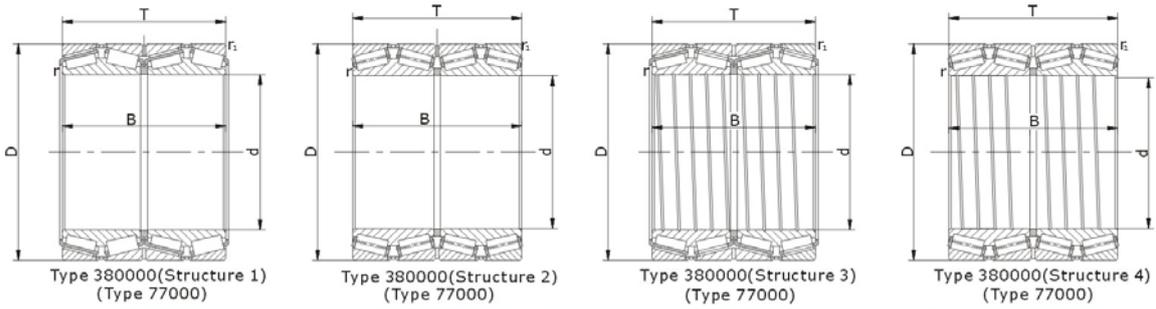
Steel pressed cages are usually used in four–row tapered roller bearings,and pin–type cages are for large–size ones.
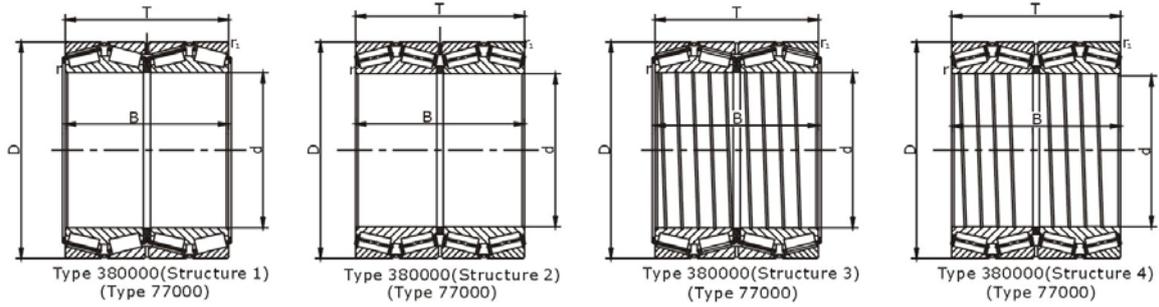
Four–row tapered roller bearings

Type 380000(Structure 1)
(Type 77000)

Type 380000(Structure 2)
(Type 77000)

Type 380000(Structure 3)
(Type 77000)

Type 380000(Structure 4)
(Type 77000)

Boundary dimensions					Basic load ratings		Designations		Mass	Limiting speeds	
mm					kN					r/min	
d	D	T	r_{min}	r_{1min}	Cr	Cor	Current	Original	kg	Grease	Oil
150	210	165	2.5	2	700	1700	382930	2077930	16.5	670	850
160	220	165	2.5	2	795	2090	382932	2077932	18.5	670	850
170	260	230	3	2.5	907	1720	382034	2077134	39.5	670	850
200	310	200	3	2.5	1660	3100	382040X2	77740	55.6	560	700
	310	275	3	2.5	1760	4200	382040	2077140	75.1	560	700
205	320	205	3	3	1590	3260	380641	77741	57	500	630
220	340	305	4	3	2070	5430	382044	2077144	97.9	500	630
240	360	310	4	3	2110	5610	382048	2077148	90.5	450	560
250	460	270	5	4	3650	8250	380650	77750	192	380	480
260	360	265	3	2.5	1760	5220	382952	2077952	76.3	450	560
	400	255	4	7.5	2300	5000	380652	77752	114	490	600
	400	345	5	4	2960	7380	382052	2077152	153	430	530
	440	300	2	5	3550	8200	380152	777752	164	450	560
280	420	250	5	5	2780	5700	380656	77756	119	450	560
	460	324	5	4	2840	7290	381156	1077756	200	360	450

Four-row tapered roller bearings

Type 380000(Structure 1) (Type 77000) Type 380000(Structure 2) (Type 77000) Type 380000(Structure 3) (Type 77000) Type 380000(Structure 4) (Type 77000)

Boundary dimensions					Basic load ratings		Designations		Mass	Limiting speeds	
mm					kN					r/min	
d	D	T	r_{min}	r_{1min}	Cr	Cor	Current	Original	kg	Grease	Oil
300	420	300	4	3	2330	7210	382960	2077960	130	380	480
	420	310	4	3	3250	8150	380660	77860	134	380	480
	460	390	5	4	3180	9330	382060	2077160	238	360	450
	500	350	5	4	2980	6950	381160X2	77760	286	340	430
	500	370	5	4	3390	8710	381160	1077760	285	340	430
320	460	338	4	4	2950	8200	380664	77764	180	360	450
	460	380	4	4	3100	8750	380664X2	77864	218	360	450
	480	380	5	4	3180	9330	382064	2077164	234	340	430
340	460	310	4	3	2480	8100	382968	2077968	145	340	430
	520	325	5	4	3100	8620	381068	77168	234	320	400
	580	425	5	4	4580	11700	381168	1077768	441	280	360
350	590	420	2	5	4700	9700	380670	77770	475	280	360
360	480	310	4	3	2760	8300	382972	2077972	149	340	430
	480	375	3	3	3010	7870	380672	77872	189	340	430
	540	325	5	4	3388	8840	381072	77172	248	300	380
	600	420	6	6	7900	14000	381172	1077772	388	280	360
380	550	350	5	5	5250	13100	380676	77776	273	280	360
	560	325	5	4	3360	8840	381076	77176	281	280	380
	620	388	6	6	4200	9500	381176X2	3077776	443	240	360
	620	420	5	4	4710	12300	381176	1077776	519	240	360
395	545	288.7	4	7.5	2610	7490	380679	77779	194	280	360
400	540	280	4	4	3100	8750	380680	77880	175	280	360
	600	356	5	4	4160	10400	381080	77180	317	240	320
420	620	356	5	4	4160	10400	381084	77184	358	220	300
	700	480	6	5	6780	18500	381184	1077784	760	190	260
	760	500	7.5	7.5	9350	20300	380684	77884	1039	180	240
440	620	454	6	6	3960	7880	380688	77888	440	200	280
	650	355	6	6	4290	12390	380088	77788	385	200	280
	650	376	6	5	4330	13700	381088	77188	401	200	280
460	620	310	4	3	3360	10200	381992	1077992	173	200	280
	650	474	6	6	7200	15240	380692	77892	495	180	240
	680	410	6	5	5130	14200	381092	77192	476	180	240
	730	440	4	7.5	6500	15100	380692X3	77792	694	170	220
480	700	420	6	5	5780	16900	381096	77196	547	170	220
500	720	420	6	5	6650	19400	3810/500	771/500	565	160	200
530	780	450	6	5	7520	21500	3810/530	771/530	744	140	180
	870	590	7.5	6	9300	26100	3811/530	10777/530	1422	120	160
	880	544	7.5	7.5	10500	25600	3806/530	30777/530	1350	120	160
540	690	400	5	5	4860	17300	–	779/540	375	160	200
560	730	410	4	6	5560	18900	3828/560X	–	441	140	180
	750	368	5	4	4370	13300	3819/560	10779/560	456	140	180
	920	620	7.5	6	11200	26100	3811/560	10777/560	1635	100	140

Four–row tapered roller bearings

Type 380000(Structure 1)
(Type 77000)

Type 380000(Structure 2)
(Type 77000)

Type 380000(Structure 3)
(Type 77000)

Type 380000(Structure 4)
(Type 77000)

Boundary dimensions					Basic load ratings		Designations		Mass	Limiting speeds	
mm					kN					r/min	
d	D	T	r_{min}	r_{1min}	Cr	Cor	Current	Original	kg	Grease	Oil
600	800	365	5	5	5000	17800	–	779/600	489	120	160
	800	380	5	4	5500	18900	3819/600	10779/600	536	120	160
	870	480	6	5	8370	25400	3810/600	771/600	995	100	140
	980	650	7.5	6	12700	36700	3811/600	10777/600	1970	90	120
630	850	418	6	5	6440	19800	3819/630	10779/630	720	100	140
	920	515	7.5	6	9170	26800	3810/630	771/630	1158	95	130
	1030	670	7.5	6	14400	39900	3811/630	10777/630	2170	85	110
650	1030	560	7.5	12	11460	22050	3806/650	777/650	1769	85	110
670	900	412	6	5	6940	22300	3819/670	10779/670	959	95	130
	1090	710	7.5	6	15700	39900	3811/670	10777/670	2665	75	95
710	1030	555	7.5	6	11200	35800	3810/710	771/710	1568	75	95
750	1090	605	7.5	6	13100	42400	3810/750	771/750	1874	70	90
	1220	840	9.5	8	21900	68000	3811/750	10777/750	3994	48	80
774	1130	690	4	7.5	16700	50100	–	777/774	2400	48	80
950	1360	880	7.5	6	23300	83600	3820/950	20771/950	4087	–	–
1060	1500	1000	9.5	8	29100	105000	3820/1060	20771/1060	5698	–	–
1070	1400	889.762	4	12	27270	90000	BT4B328100	–	3730	–	–
1080	1450	950	5	12	30240	97200	BT4B331559	–	4450	–	–
1250	1550	890	5	12	27270	102600	BT4B328819	–	3820	–	–
1260	1640	1000	5	12	35190	128700	BT4B332124	–	5800	–	–
1300	1720	1040	5	12	38610	126000	BT4B331950	–	7000	–	–
1500	1900	1080	4	12	42120	153000	BT4B332078	–	7700	–	–
1580	1960	1080	5	12	41130	158400	BT4B331934	–	7800	–	–