

Double row spherical roller bearings for railway vehicle axles

Dimensions						Basic Load Rating		Bearing Designation	Limiting Speed for Lubrication with Grease
d	D	B	r _s min	a	b	Dynamic C _r	Static C _{or}		
mm						kN			min ⁻¹
100	180	60.3	2.1	4.5	8.3	512	667	23220EW33MH**	1 700
110	200	69.8	2.1	4.5	8.3	645	867	23222EW33MH**	1 600
120	215	76	2.1	4.5	8.3	750	1020	23224EW33MH**	1 500
120	215	58	2.1	4.5	8.3	608	775	22224EW33MH**	1 900
130	220	73	3	6	11.1	570	1 080	PLC 59-7 ¹⁾	1 400
130	230	80	3	4.5	8.3	828	1 180	23226EW33MH**	1 300
130	280	93	4	7.5	13.9	1 180	1 380	22326EW33MH**	1 300
140	210	53	2	4.5	8.3	511	781	23028EW33MH**	1 800
140	250	68	3	6	11.1	822	1 080	22228EW33MH**	1 700
170	310	110	4	7.5	13.9	1 470	2 040	23234EW33MH**	950
190	290	75	2.1	7.5	13.9	962	1 510	23038EW33MH**	1 300
190	340	120	4	9	16.7	1 730	2 530	23238EW33MH**	850

¹⁾ Double row spherical roller bearing according to UIC dimensional plan for railway vehicle axles with the pivot 130 mm

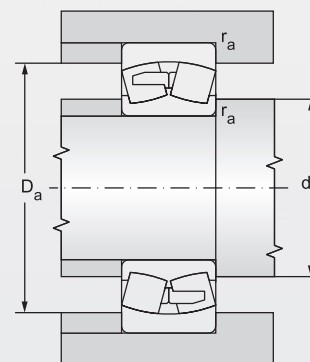
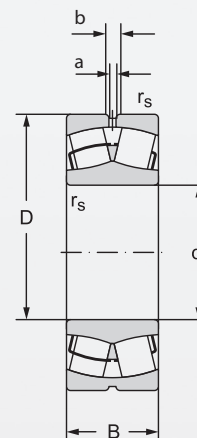
** Bearing ZKL NEW FORCE

Tapered bearing unit TBU

Dimensions				Basic Load Rating		Bearing Designation	Equivalent
d	D	C	B	Dynamic C _r	Static C _{or}		
mm				kN			
130	210	132	148	658	1 260	PLC 810-15	CTBU 130x210
130	230	160	176.35	913	1 620	PLC 810-13	CTBU 130x230
150	250	160	154.5	1 060	2 100	PLC 810-14	CTBU 150x250

d = 100 to 190 mm

Abutment and Fillet Dimensions			Weight	Factors			
d_a min	D_a max	r_a max		e	Y_1	Y_2	Y_0
mm			kg				
112	168	2	6.67	0.31	2.2	3.2	2.1
122	188	2	9.67	0.33	2.1	3.1	2
132	203	2	12.1	0.33	2	3	2
132	203	2	9.07	0.25	2.7	3.9	2.5
144	206	2.5	10.1	0.34	2	2.9	1.9
144	216	2.5	14.2	0.33	2.1	3.1	2
148	262	3	27.4	0.33	2.1	3.1	2
150	200	2	6.58	0.22	3	4.5	3
154	236	2.5	14.3	0.25	2.7	3.9	2.5
188	292	3	36	0.34	2	3	2
202	278	2	17.6	0.23	2.9	4.4	2.9
208	322	3	46.5	0.33	2	3	2



Speed of Rail Vehicle	Weight
km.h ⁻¹	kg
100	18
160	31.7
200	45

