



# CATALOGUE

**Spherical Roller Thrust Bearings**

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Spherical roller thrust bearings comprise a consistent, entire manufacturing program both in dimensional and design series 292, 293 and 294, being in compliance with the international standards ISO by their design and manufacturing process. Quality management system of the whole manufacturing process of spherical roller thrust bearings is certified according to international standards series 9000.

Contrary to other thrust bearings the spherical roller thrust bearings loads are transferred from one raceway to the other under certain angle; this enables to accommodate also radial load in addition to axial load. Spherical roller thrust bearings are separable, therefore the shaft ring with cage and spherical rollers and housing(outer) ring can be installed individually. Another important feature of these bearings is their ability to tilt, which allows the possibility of alignment of shaft deflection and of verticality deviation to the housing.

Spherical roller thrust bearings are produced, in dependence to size and type, in two designs – in standard and E design. Outstanding feature of bearings of E design are their higher utility parameters, they represent a new generation of spherical roller thrust bearings. Being of identical main dimensions, they have upper utility properties. Both designs can be produced with machined brass cage M or with steel sheet cage J.

Should a bearing with machined brass cage, in which acting axial forces were accommodated also by sentence incomplete.

The inner space of spherical roller thrust bearings can be efficiently utilized. Therefore they are suitable for accommodation of great load at relatively high speed frequency. The bearings are capable to accommodate in addition to axial load also certain radial forces, anyhow these must be of smaller value than 55 percent of simultaneously acting axial force. Housing ring spherical raceway enables to align verticality deviations between the shaft and housing.

For their high utility values the spherical roller thrust bearings find wide application in many fields and industrial sectors.

They are mainly used in the following installations:

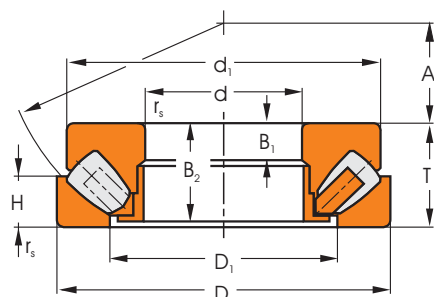
- medium and heavy-duty forming machines
- ship drive shafts
- drilling rigs of all types and sizes
- medium and heavy-duty cranes including crane hooks
- pumps of medium and large sizes and capacities
- mining tunnelling machines and mining engineering
- heavy load swivelling turntables of installations in open pit mines and stone quarries
- power plant engineering (turbines, generating sets, electric motors).



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Dimensions, mm Glavne dimenzije							Load ratings, kN Opterećenje		Limiting speed, min <sup>-1</sup> , (lubricant) Maksimalan broj obrtaja u minuti Grease Oil		Mass, kg Masa	GOST designation (National Standard) Oznaka GOST	Designation by IKL Oznaka DIN
d	D	H	r <sub>smin</sub>	B <sub>1</sub>	d <sub>1</sub>	D <sub>1</sub>	C	C <sub>0</sub>					
140	280	85	4	75,6	245,4	194,5	1630	4300	1300	2400	23	9039428A	29428MB
150	300	90	4	80,8	262,9	207,5	1860	5100	1200	2200	28	9039430A	29430MB
160	320	95	5	84,3	279,3	223,5	2080	5600	1100	2000	33,5	9039432A	29432MB
180	360	109	5	96,4	315,9	250	2600	7350	1000	1800	52,5	9039436A	29436MB
190	380	115	5	101	332,9	264,5	2850	8000	950	1700	60,5	9039438A	29438MB
260	480	132	6	119	427,9	346	4050	12900	750	1300	105	9039452A	29452MB
280	520	145	6	129,9	464,3	372	4900	15300	670	1200	135	9039456A	29456MB
320	580	155	7,5	139,4	520,3	422	4950	19000	560	1100	175	9039464A	29464MB
360	640	170	7,5	164	580	474	5350	21200	500	950	230	9039472A	29472MB
380	670	175	7,5	168	610	494	5870	24000	480	900	260	9039476A	29476MB
440	240	206	9,5	199	710	577	7820	32000	380	750	410	9039488A	29488MB
500	870	224	9,5	216	795	648	9370	40000	340	670	560	90394/500A	294/500MB
530	920	236	9,5	228	840	686	10500	44000	320	630	650	90394/530A	294/530MB
560	980	250	12	241	890	727	12000	51000	300	560	810	90394/560A	294/560MB
600	1030	258	12	249	940	769	13100	56000	280	530	845	90394/600A	294/600MB
630	1090	280	12	270	995	815	14400	62000	260	500	1040	90394/630A	294/630MB
670	1150	290	15	280	1045	864	15400	68000	240	450	1210	90394/670A	294/670MB
710	1220	308	15	298	1110	917	17600	76500	220	430	1500	90394/710A	294/710MB

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d	D	H	r <sub>smn</sub>	B <sub>1</sub>	d <sub>1</sub>	D <sub>1</sub>	C	C <sub>0</sub>					
750	1280	315	15	305	1170	964	18700	85000	200	400	1650	90394/750A	294/750MB
800	1360	335	15	324	1250	1034	20200	93000	190	360	2025	90394/800A	294/800EF
850	1440	354	15	342	1315	1077	23900	108000	170	340	2390	90394/850A	294/850EF
900	1520	372	15	360	1394	1137	26700	122000	160	300	2650	90394/900A	294/900EF
950	1600	390	15	377	1470	1209	28200	132000	140	280	3065	90394/950A	294/950EF
1000	1670	402	15	389	1531	1270	31100	14000	130	260	3380	90394/1000A	294/1000EF

