



# CATALOGUE

**Insulated bearings**

## Insulated bearings

# Insulated Bearings

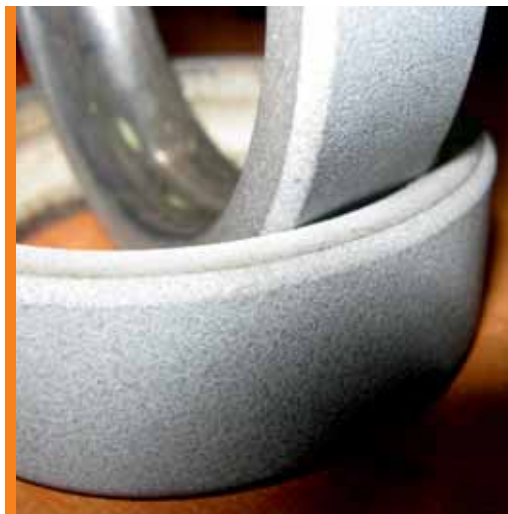
Electrical pitting often occurs in bearings used in electrical equipment, such as motors and power generators, as a result of current leakage. An electrical current present near a bearing can flow to the inside of the bearing, causing sparks that damage the rolling contact surface, ultimately leading to bearing failure. This electrical pitting can be prevented with coated bearings.

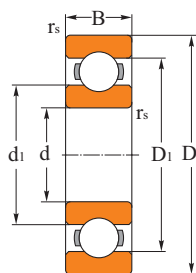
Insulated bearings have been specifically designed to counteract electrical pitting. Coating the outer ring of the bearing provides a barrier (capable of resisting at least 100 M at 500 VDC) against any stray currents that would pass through the bearing.

### The Coating Process

The plasma spraying process involves generating an arc between two electrodes to ionize a noble gas that is issued from the plasma torch. The resulting plasma jet is used to carry the injected aluminum oxide powder. This powder is melted by the heat and sprayed at high speed onto the outer ring. When applied in this manner, the oxide layer adheres extremely well to the base material. It is then sealed and ground to size. This unique technology has the following benefits:

- Plasma spraying is the most versatile thermal coating process – it produces high-performance coatings that deliver durability and reliability.
- The process applies coatings by injecting aluminum oxide powder into a high temperature gas stream. The plasma gas heats the powdered coating material to a molten state and sprays it onto substrates at high speeds.
- Plasma spraying is extremely flexible and is ideal for producing a wide variety of functional coatings.





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 used by IKL Oznaka DIN	
d	D	B	r <sub>smin</sub>	d <sub>1</sub>	D <sub>1</sub>	C	C <sub>0</sub>					
60	110	22	1,5	76,1	95,6	30	46	5440	11200	0,98	76-212ЛЭ	6212 M AL O C3
65	140	33	2,1	88,6	117,5	50	80	5120	8800	2,55	76-313ЛЭ	6313 M AL O C3
70	125	24	1,5	86,8	110,7	39	57	4880	9600	1,11	76-214ЛЭ	6214 M AL O C3
75	130	25	1,5	92,5	112,8	44	60	4720	8800	1,42	76-215ЛЭ	6215 M AL O C3
75	160	37	2,1	101,8	133,2	70	107	4640	7600	3,74	76-315ЛЭ	6315 M AL O C3
80	140	26	2	98,8	121,3	50	68	4400	8800	1,46	76-216ЛЭ	6216 M AL O C3
80	170	39	2,1	108,6	141,8	80	110	4400	7200	3,75	76-316ЛЭ	6316 M AL O C3
85	180	41	3	114,4	151,6	85	120	4240	6400	5,05	76-317ЛЭ	6317 M AL O C3
90	160	30	2	112,3	139,4	65	90	4080	7200	2,21	76-218ЛЭ	6218 M AL O C3
90	190	43	3	123,8	157,1	95	120	4080	6400	6,14	76-318ЛЭ	6318 M AL O C3
95	200	45	3	129,1	166,9	105	120	3960	6000	7,05	76-319ЛЭ	6319 M AL O C3
100	180	34	2,1	124,7	154,8	80	110	3840	6400	3,9	76-220ЛЭ	6220 M AL O C3
100	215	47	3	138,6	179	120	140	3720	5600	8,64	76-320ЛЭ	6320-M AL O C3
110	240	50	3	153,4	197,4	140	170	3320	5040	11,7	76-322ЛЭ	6322-M AL O C3
120	260	55	3	165,1	214,9	160	190	3080	4800	15	76-324ЛЭ	6324-M AL O C3

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