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Proven
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PRODUCT RANGE



UPEC is one of the leading CIS manufacturers of bearings, electric motors, pumps, CNC grinding machines, transmissions and chassis, air-cycle climate control systems, trailed agricultural machinery as well as other machines, equipment, units and components for automotive, railway, agricultural, power and electric machinery, defense, metallurgical and other industries.

UPEC was established in 1995 and today it unites a number of leading manufacturing companies and engineering centres with more than half a century of history.



Kharkov Bearing Plant HARP (Ukraine) holds leading positions in the CIS in the production of bearings for many industries: railway, agricultural machinery, automotive industry and others.

Kharkov Bearing Plant manufactures over 500 types of bearings with outer diameter from 30 to 400 mm under the HARP, HARP-AGRO and HARP-AUTO trademarks, hotforged and cold-rolled semi-finished products and components for automotive, railway and industrial bearings.

A wealth of design and production experience (over 70 years) enables the company to continuously improve the developed products; thus, taking into consideration the machinery operating conditions and the machinery design modification of the leading in the CIS engineering and manufacturing companies, which production lines are currently supplied with HARP bearings.

The company is ISO 9001:2008 and ISO/TS 16949:2009 certified. It is also a approved supplier for SKF, Schaeffler Group – the world leaders in the manufacture of bearings.

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SINGLE ROW DEEP GROOVE BALL BEARINGS

Single row deep groove ball bearings are intended for operation under radial loads. They also accommodate axial and combined loads. These bearings are produced both with pressed two-piece cage or massive (window-type) cage from different materials. They achieve the highest speed ratings and can operate at high rotational speed.

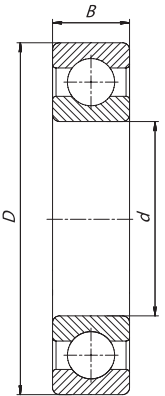


Fig. 1

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	114A	6014	70	110	20	0,58	39,59	24,5	6000	7000	1
2	6-114A	6014P6	70	110	20	0,58	39,59	24,5	6000	7000	1
3	115A	6015	75	115	20	0,6	41,68	26	5600	6700	1
4	70-115A	6015C3	75	115	20	0,6	41,68	26	5600	6700	1
5	117A	6017	85	130	22	0,86	50,8	33,5	5000	6000	1
6	6-117A	6017P6	85	130	22	0,86	50,8	33,5	5000	6000	1
7	118A	6018	90	140	24	1,17	60,06	39	4800	5600	1
8	120A	6020	100	150	24	1,18	63,52	41,5	4300	5000	1
9	122A	6022	110	170	28	1,99	85,9	73,5	3800	4500	1
10	6-122A	6022P6	110	170	28	1,99	85,9	73,5	3800	4500	1
11	126A	6026	130	200	33	3,17	114,8	78	3200	3800	1
12	6-126A	6026P6	130	200	33	3,17	114,8	78	3200	3800	1
13	130A	6030	150	225	35	4,14	137,5	125	2600	3200	1
14	6-130A	6030P6	150	225	35	4,14	137,5	125	2600	3200	1
15	204A	6204	20	47	14	0,1	13,33	6,55	15000	18000	1
16	6-204A	6204P6	20	47	14	0,1	13,33	6,55	15000	18000	1
17	70-204A	6204C3	20	47	14	0,1	13,33	6,55	15000	18000	1
18	205A	6205	25	52	15	0,1	14,7	6,95	12000	15000	1
19	6-205A	6205P6	25	52	15	0,1	14,7	6,95	12000	15000	1
20	6-205AШ1	6205P6	25	52	15	0,1	14,7	6,95	12000	15000	1
21	6-205AKVШ1	6205P6	25	52	15	0,1	14,7	6,95	12000	15000	1
22	70-205A	6205C3	25	52	15	0,1	14,7	6,95	12000	15000	1
23	206A	6206	30	62	16	0,2	19,5	11,25	10000	13000	1
24	6-206A	6206P6	30	62	16	0,2	19,5	11,25	10000	13000	1
25	207A	6207	35	72	17	0,3	26,77	15,3	9000	11000	1
26	207AШ	6207	35	72	17	0,3	26,77	15,3	9000	11000	1
27	6-207A	6207P6	35	72	17	0,3	26,77	15,3	9000	11000	1
28	6-207AШ1	6207P6	35	72	17	0,3	26,77	15,3	9000	11000	1

SINGLE ROW DEEP GROOVE BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
29	70-207A	6207C3	35	72	17	0,3	26,77	15,3	9000	11000	1
30	208A	6208	40	80	18	0,4	33,6	19	8500	10000	1
31	6-208A	6208P6	40	80	18	0,4	33,6	19	8500	10000	1
32	70-208A	6208C3	40	80	18	0,4	33,6	19	8500	10000	1
33	208AE	6208T	40	80	18	0,4	33,6	19	8500	10000	1
34	209A	6209	45	85	19	0,4	34,86	21,6	7500	9000	1
35	6-209AШ1	6209P6	45	85	19	0,4	34,86	21,6	7500	9000	1
36	6-209AВШ1	6209P6	45	85	19	0,4	34,86	21,6	7500	9000	1
37	210	6210	50	90	20	0,5	35,1	23,2	7000	8500	1
38	210AВШ1	6210	50	90	20	0,5	35,1	23,2	7000	8500	1
39	211A	6211	55	100	21	0,6	45,78	29	6300	7500	1
40	211AВШ1	6211	55	100	21	0,6	45,78	29	6300	7500	1
41	66-211AШ1	6211P62	55	100	21	0,6	45,78	29	6300	7500	1
42	212A	6212	60	110	22	0,8	54,6	31	6000	7000	1
43	212AВШ1	6212	60	110	22	0,8	54,6	31	6000	7000	1
44	6-212AШ1	6212P6	60	110	22	0,8	54,6	31	6000	7000	1
45	66-212AШ1	6212P62	60	110	22	0,8	54,6	31	6000	7000	1
46	70-212A	6212C3	60	110	22	0,8	54,6	31	6000	7000	1
47	80-212A	6212C4	60	110	22	0,8	54,6	31	6000	7000	1
48	213A	6213	65	120	23	1	58,8	40,5	5300	6300	1
49	6-213AШ1	6213P6	65	120	23	1	58,8	40,5	5300	6300	1
50	70-213A	6213C3	65	120	23	1	58,8	40,5	5300	6300	1
51	214	6214	70	125	24	1,1	61,8	45	5000	6000	1
52	6-214AШ1	6214P6	70	125	24	1,1	61,8	45	5000	6000	1
53	215	6215	75	130	25	1,2	66,3	49	4800	5600	1
54	6-215	6215P6	75	130	25	1,2	66,3	49	4800	5600	1
55	6-215Ш1	6215P6	75	130	25	1,2	66,3	49	4800	5600	1
56	216	6216	80	140	26	1,4	70,2	55	4500	6300	1
57	6-216	6216P6	80	140	26	1,4	70,2	55	4500	6300	1
58	217A	6217	85	150	28	1,8	87,36	64	4300	5000	1
59	217AШ1	6217	85	150	28	1,8	87,36	64	4300	5000	1
60	6-217	6217P6	85	150	28	1,8	87,36	64	4300	5000	1
61	6-217AШ1	6217P6	85	150	28	1,8	87,36	64	4300	5000	1
62	218A	6218	90	160	30	2,2	101	71,5	3800	4500	1
63	6-218A	6218P6	90	160	30	2,2	101	71,5	3800	4500	1
64	70-218A	6218C3	90	160	30	2,2	101	71,5	3800	4500	1
65	80-218A	6218C4	90	160	30	2,2	101	71,5	3800	4500	1
66	220A	6220	100	180	34	2,9	128	93	3400	4000	1
67	6-220A	6220P6	100	180	34	2,9	128	93	3400	4000	1
68	222A	6222	110	200	38	4,4	153,3	118	3000	3600	1
69	224A	6224	120	215	40	5,24	156	131	2800	3400	1

SINGLE ROW DEEP GROOVE BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
70	6-224A	6224P6	120	215	40	5,24	156	131	2800	3400	1
71	6-224AШ1	6224P6	120	215	40	5,24	156	131	2800	3400	1
72	226A	6226	130	230	40	6,1	168,3	146	2600	3200	1
73	6-226A	6226P6	130	230	40	6,1	168,3	146	2600	3200	1
74	304	6304	20	52	15	0,1	16,69	7,8	13000	16000	1
75	6-304	6304P6	20	52	15	0,1	16,69	7,8	13000	16000	1
76	70-304	6304C3	20	52	15	0,1	16,69	7,8	13000	16000	1
77	305A	6305	25	62	17	0,2	23,6	11,6	11000	14000	1
78	305AШ1	6305	25	62	17	0,2	23,6	11,6	11000	14000	1
79	6-305A	6305P6	25	62	17	0,2	23,6	11,6	11000	14000	1
80	6-305Ш1	6305P6	25	62	17	0,2	23,6	11,6	11000	14000	1
81	6-305A1EШ1	6305P6	25	62	17	0,2	27,5	12,9	11000	14000	1
82	70-305A	6305C3	25	62	17	0,2	23,6	11,6	11000	14000	1
83	70-305AШ1	6305C3	25	62	17	0,2	23,6	11,6	11000	14000	1
84	306	6306	30	72	19	0,3	28,1	14,6	9000	11000	1
85	6-306	6306P6	30	72	19	0,3	28,1	14,6	9000	11000	1
86	6-306Ш1	6306P6	30	72	19	0,3	28,1	14,6	9000	11000	1
87	70-306	6306C3	30	72	19	0,3	28,1	14,6	9000	11000	1
88	307A	6307	35	80	21	0,4	34,86	19	8500	10000	1
89	6-307A	6307P6	35	80	21	0,4	34,86	19	8500	10000	1
90	6-307AШ1	6307P6	35	80	21	0,4	34,86	19	8500	10000	1
91	308A	6308	40	90	23	0,6	42,3	24	7500	9000	1
92	6-308A	6308P6	40	90	23	0,6	42,3	24	7500	9000	1
93	6-308AШ1	6308P6	40	90	23	0,6	42,3	24	7500	9000	1
94	70-308A	6308C3	40	90	23	0,6	42,3	24	7500	9000	1
95	309A	6309	45	100	25	0,8	55,33	31,5	6700	8000	1
96	6-309A	6309P6	45	100	25	0,8	55,33	31,5	6700	8000	1
97	6-309AШ1	6309P6	45	100	25	0,8	55,33	31,5	6700	8000	1
98	310A	6310	50	110	27	1,1	64,89	38	6300	7500	1
99	6-310A	6310P6	50	110	27	1,1	64,89	38	6300	7500	1
100	6-310AШ1	6310P6	50	110	27	1,1	64,89	38	6300	7500	1
101	70-310A	6310C3	50	110	27	1,1	64,89	38	6300	7500	1
102	311A	6311	55	120	29	1,4	75,07	45	5600	6700	1
103	6-311A	6311P6	55	120	29	1,4	75,07	45	5600	6700	1
104	70-311A	6311C3	55	120	29	1,4	75,07	45	5600	6700	1
105	312A	6312	60	130	31	1,7	86	52	5000	6000	1
106	6-312A	6312	60	130	31	1,7	86	52	5000	6000	1
107	70-312A	6312C3	60	130	31	1,7	86	52	5000	6000	1
108	313A	6313	65	140	33	2,1	96,91	60	4800	5600	1
109	6-313A	6313	65	140	33	2,1	96,91	60	4800	5600	1
110	6-313AШ1	6313P6	65	140	33	2,1	96,91	60	4800	5600	1

SINGLE ROW DEEP GROOVE BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
111	70-313A	6313C3	65	140	33	2,1	96,91	60	4800	5600	1
112	314A	6314	70	150	35	2,525	109,2	68	4500	5300	1
113	6-314AШ1	6314P6	70	150	35	2,525	109,2	68	4500	5300	1
114	70-314A	6314C3	70	150	35	2,525	109,2	68	4500	5300	1
115	315A	6315	75	160	37	3	117,6	76,5	4300	5000	1
116	315AШ	6315	75	150	37	3	117,5	76,5	4300	5000	1
117	6-315A	6315P6	75	160	37	3	117,6	76,5	4300	5000	1
118	6-315AШ1	6315P6	75	160	37	3	117,6	76,5	4300	5000	1
119	70-315AШ	6315C3	75	160	37	3	117,6	76,5	4300	5000	1
120	316A	6316	80	170	39	3,6	130,2	86,5	3800	4500	1
121	316AШ	6316	80	170	39	3,6	130,2	86,5	3800	4500	1
122	6-316AШ1	6316P6	80	170	39	3,6	130,2	86,5	3800	4500	1
123	317A	6317	85	180	41	4,2	139,65	96,5	3600	4300	1
124	6-317A	6317P6	85	180	41	4,2	139,65	96,5	3600	4300	1
125	6-317Ш1Y	6317P6	85	180	41	4,2	139,65	96,5	3600	4300	1
126	6-317Ш2Y	6317P6	85	180	41	5,3	139,65	96,5	3600	4300	1
127	70-317A	6317C3	85	180	41	4,2	139,65	96,5	3600	4300	1
128	76-317ЛШ2	6317P63	85	180	41	4,2	139,65	96,5	3600	4300	1
129	76-317ЛШ2Y	6317P63	85	180	41	4,2	139,65	96,5	3600	4300	1
130	318A	6318	90	190	43	4,86	151	108	3400	4000	1
131	6-318A	6318P6	90	190	43	4,86	151	108	3400	4000	1
132	70-318A	6318C3	90	190	43	4,86	151	108	3400	4000	1
133	319A	6319	95	200	45	5,55	160	118	3200	3800	1
134	6-319A	6319P6	95	200	45	5,55	160	118	3200	3800	1
135	320A	6320	100	215	47	7	182,7	140	3000	3600	1
136	76-320ЛШ2	6320P63	100	215	47	8,96	182,7	140	3000	3600	1
137	322A	6322	110	240	50	9,39	213,15	180	2600	3200	1
138	76-322ЛШ2	6322P63	110	240	50	11,44	230	180	2600	3200	1
139	406	6406	30	90	23	0,7	47	26,7	8500	10000	1
140	6-406	6406P6	30	90	23	0,7	47	26,7	8500	10000	1
141	70-406	6406C3	30	90	23	0,7	47	26,7	8500	10000	1
142	407	6407	35	100	25	0,9	55,3	31	7000	8500	1
143	408	6408	40	110	27	1,2	63,7	36,5	6700	8000	1
144	409	6409	45	120	29	1,5	76,1	45,5	6000	7000	1
145	6-409Ш1	6409P6	45	120	29	1,5	76,1	45,5	6000	7000	1
146	70-409	6409C3	45	120	29	1,5	76,1	45,5	6000	7000	1
147	410	6410	50	130	31	1,9	87,1	52	5300	6300	1
148	411	6411	55	140	33	2,3	100	63	5000	6000	1
149	412	6412	60	150	35	2,8	108	70	4800	5600	1
150	413A	6413	65	160	37	3,18	124	78	4500	5300	1
151	6-413AШ1	6413P6	65	160	37	3,18	124	78	4500	5300	1

SINGLE ROW DEEP GROOVE BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
152	70-413A	6413C3	65	160	37	3,18	124	78	4500	5300	1
153	414A	6414	70	180	42	4,704	150,15	105	3800	4500	1
154	416A	6416	80	200	48	7	171,7	125	3400	4000	1
155	124A	6024	120	180	28	2,13	88,9	80	3400	4000	1
AT THE DEVELOPMENT STAGE											
156	6-124A	6024P6	120	180	28	2,13	88,9	80	3400	4000	1

SINGLE ROW DEEP GROOVE BALL BEARINGS
WITH SPLIT OUTER RING

Single row deep groove ball bearings without cages with split outer ring and slot for balls filling have big radial load ratings.

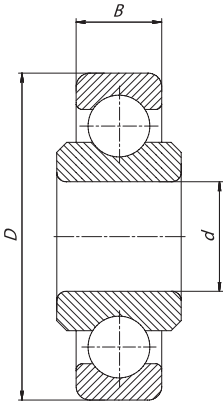


Fig. 2

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №	
									Type of grease			
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid		Mineral oil
AUTO	1	900902		14,05	42	16	0,93	12,9	8,3	—	—	2

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH GROOVE ON OUTER RING

Bearings with groove on outer ring for retaining ring are produced on the basis of single row deep groove ball bearings. Application of this structure allows to simplify design of bearing unit and mounting-dismounting operations during its assembly.

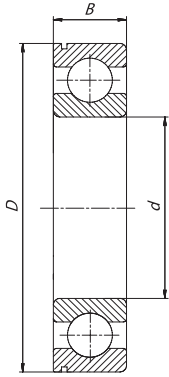


Fig. 3

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	50115A	6015N	75	115	20	0,6	41,6	33,5	5600	6700	3
2	50204	6204N	20	47	14	0,1	13,5	6,5	15000	18000	3
3	50205A	6205N	25	52	15	0,1	14,7	6,95	12000	15000	3
4	6-50205A	6205NP6	25	52	15	0,1	14,7	6,95	12000	15000	3
5	6-50205AШ	6205NP6	25	52	15	0,1	14,7	6,95	12000	15000	3
6	50206A	6206N	30	62	16	0,2	19,5	11,2	10000	13000	3
7	50207A	6207N	35	72	17	0,3	26,77	15,3	9000	11000	3
8	50207AШ	6207N	35	72	17	0,3	26,77	15,3	9000	11000	3
9	50208A	6208N	40	80	18	0,4	33,6	19	8500	10000	3
10	50208AE	6208NT	40	80	18	0,4	33,6	19	8500	10000	3
11	50209	6209N	45	85	19	0,4	34,86	21,6	7500	9000	3
12	6-50209AVШ1	6209NP6	45	85	19	0,4	34,86	21,6	7500	9000	3
13	50210	6210N	50	90	20	0,5	35,1	23,2	7000	8500	3
14	50211A	6211N	55	100	21	0,6	45,78	29	6300	7500	3
15	50212A	6212N	60	110	22	0,8	54,6	31	6000	7000	3
16	50213A	6213N	65	120	23	0,983	58,8	40,5	5300	6300	3
17	50215A	6215N	75	130	25	1,14	66,3	49	4800	5600	3
18	50217A	6217N	85	150	28	1,8	87,36	64	4300	5000	3
19	50218A	6218N	90	160	30	2,1	101	71,5	3800	4500	3
20	50305A	6305N	25	62	17	0,2	23,6	11,6	11000	14000	3
21	50305AШ	6305N	25	62	17	0,2	23,6	11,6	11000	14000	3
22	6-50305AШ1	6305NP6	25	62	17	0,2	23,6	11,6	11000	14000	3
23	50306K	6306N	30	72	19	0,3	28,1	14,6	9000	11000	3
24	6-50306KYШ1	6306NP6	30	72	19	0,3	28,1	14,6	9000	11000	3
25	50307	6307N	35	80	21	0,4	34,86	19	8500	10000	3
26	50308A	6308N	40	90	23	0,6	42,3	24	7500	9000	3
27	50309	6309N	45	100	25	0,8	55,33	31,5	6700	8000	3
28	50310A	6310N	50	110	27	1,1	64,89	38	6300	7500	3
29	50311A	6311N	55	120	29	1,4	75,07	45	5600	6700	3

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH GROOVE ON OUTER RING

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
30	50312A	6312N	60	130	31	1,7	86	52	5000	6000	3
31	50313A	6313N	65	140	33	2,1	96,91	60	4800	5600	3
32	50314A	6313N	70	150	35	2,6	109,2	68	4500	5300	3
33	50315A	6315N	75	160	37	3	117,6	76,5	4300	5000	3
34	50406	6406N	30	90	23	0,7	47	26,7	8500	10000	3
35	50407	6407N	35	100	25	0,9	55,3	31	6700	8000	3
36	50408	6408N	40	110	27	1,2	63,7	36,5	6000	7000	3
37	50409	6409N	45	120	29	1,5	76,1	45,5	6000	7000	3
38	70-50409	6409NC3	45	120	29	1,5	76,1	45,5	5300	6300	3
39	50410	6410N	50	130	31	1,9	87,1	52	5000	6000	3
40	50411	6411N	55	140	33	2,3	100	63	4800	5600	3
41	50412	6412N	60	150	35	2,8	108	70	4500	5300	3
42	50413A	6413N	65	160	37	3,4	124	78,8	8000	10000	3
43	6-50706YU1		30	75	19	0,4	33,3	17,8	8000	10000	3
44	6-50706EYU1		30	75	19	0,4	20,2	17,8	8000	10000	3
45	6-50706AEYU1		30	75	19	0,4	32,8	17,8	8000	10000	3

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SINGLE ROW DEEP GROOVE BALL BEARINGS WITH ONE SHIELD

Design of bearing protective devices in bearing unit can be simplified by the application of bearing with one shield (usually metal shield), tightly mounted in outer ring and with small gap in inner ring.

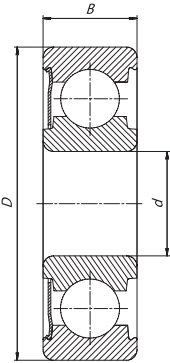


Fig. 4

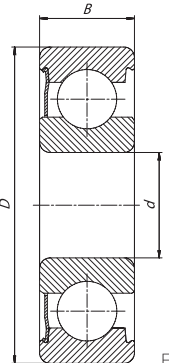


Fig. 5

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		m	Dynamic	Static	
1	60120A	6120-Z	100	150	24	1,6	63,52	54	4300	5
2	6-60120A	6120-ZP6	100	150	24	1,6	63,52	54	4300	5
3	60204A	6204-Z	20	47	14	0,1	13,33	6,5	15000	5

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH ONE SHIELD

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B	m	Dynamic	Static	Solid	
4	60205A	6205-Z	25	52	15	0,1	14,7	6,95	12000	4
5	6-60205A	6205-ZP6	25	52	15	0,1	14,7	6,95	12000	4
6	60206A	6206-Z	30	62	16	0,2	19,5	11,2	10000	4
7	60207A	6207-Z	35	72	17	0,3	26,77	15,3	9000	4
8	60207AШ	6207-Z	35	72	17	0,3	26,77	15,3	9000	4
9	60208A	6208-Z	40	80	18	0,4	33,6	19	8500	4
10	60209A	6209-Z	45	85	19	0,4	34,86	21,6	7500	4
11	60210	6210-Z	50	90	20	0,5	35,1	23,2	7000	4
12	60210AY/Ш1	6210-Z	50	90	20	0,5	35,1	23,2	7000	4
13	60211A	6211-Z	55	100	21	0,6	45,78	29	6300	4
14	60212	6212-Z	60	110	22	0,8	54,6	31	6000	4
15	60213	6213-Z	65	120	23	1	58,8	40,5	5300	4
16	60214A	6214-Z	70	125	25	1,1	61,8	45	5000	5
17	60217A	6217-Z	85	150	28	1,8	87,36	64	4300	4
18	60220	6220-Z	100	180	34	3,3	128	93	3400	4
19	60304A	6304-Z	20	52	15	0,1	16,69	7,8	13000	5
20	60305A	6305-Z	25	62	17	0,2	23,6	11,46	11000	4
21	60305AШ	6305-Z	25	62	17	0,2	23,6	11,46	11000	4
22	70-60305AШ	6305-ZC3	25	62	17	0,2	23,6	11,46	11000	4
23	60306	6306-Z	30	72	19	0,3	28,1	14,6	9000	4
24	60307A	6307-Z	35	80	21	0,4	34,86	19	8500	5
25	60308A1	6308-Z	40	90	23	0,6	42,3	24	7500	5
26	60309	6309-Z	45	100	25	0,8	55,33	31,5	6700	4
27	60310A	6310-Z	50	110	27	1,1	64,89	38	6300	4
28	60311	6311-Z	55	120	29	1,4	75,07	45	5600	4
29	60312	6312-Z	60	130	31	1,7	86	52	5000	4
30	60313A	6313-Z	65	140	33	2,1	96,61	60	4800	5
31	60314A	6314-Z	70	150	35	2,6	109,2	68	4500	5
32	60315A	6315-Z	75	160	37	3,1	117,6	76,5	4300	5
33	70-60315A	6315-ZC3	75	160	37	3,1	117,6	76,5	4300	5
34	60317A	6317-Z	85	180	41	4,5	139,65	96,5	3600	5
35	6-60903A1		16	40	12	0,1	9,5	4,5	16000	5

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH TWO SHIELDS

Application of bearing with two shields (with grease filled during production) simplifies design of the unit and avoids the necessity in technical maintenance during operation.

These bearings shall be neither washed nor heated before mounting.

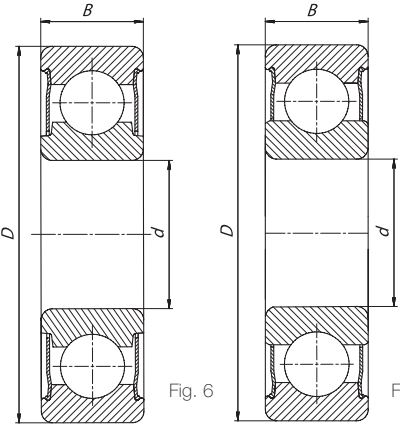


Fig. 6

Fig. 7

№	Bearing designation		Overall dimensions, mm			Weight, kg m	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B		Dynamic	Static	Type of grease Solid	
1	80120AC17	6202-2Z	100	150	24	1,2	63,52	54	4300	7
2	80204AC17	6204-2Z	20	47	14	0,09	13,33	6,5	15000	7
3	70-80204AC17	6204-2ZC3	20	47	14	0,09	13,33	6,5	15000	7
4	80205AC17	6205-2Z	25	52	15	0,1	14,7	6,95	12000	6
5	70-80205AC17	6205-2ZC3	25	52	15	0,1	14,7	6,95	12000	6
6	6-80205AEC17	6205-2ZTP6	25	52	15	0,1	14,7	6,95	12000	6
7	6-80205AC17Щ1	6205-2ZP6	25	52	15	0,1	14,7	6,95	12000	6
8	80205AEYC17	6205-2ZT	25	52	15	0,1	14,7	6,95	12000	6
9	80206AC17	6206-2Z	30	62	16	0,2	19,5	11,2	10000	6
10	80207AC17	6207-2Z	35	72	17	0,3	26,77	15,3	9000	6
11	80208AC17	6208-2Z	40	80	18	0,4	33,6	19	8500	6
12	80209AC17	6209-2Z	45	85	19	0,4	34,86	21,6	7500	6
13	80210C17	6210-2Z	50	90	20	0,5	35,1	23,2	7000	6
14	80211AC17	6211-2Z	55	100	21	0,6	45,78	29	6300	6
15	80212C17	6212-2Z	60	110	22	0,9	54,6	31	6000	6
16	80213C17	6213-2Z	65	120	23	1	58,8	40,5	5300	6
17	80214AC17	6214-2Z	70	125	24	1,1	61,8	45	5000	7
18	80215AC17	6215-2Z	75	130	25	1,1	66,3	49	4800	7
19	80-80215AC3	6215-2ZC4	75	130	25	1,1	66,3	49	4800	7
20	80217AC17	6217-2Z	85	150	28	1,8	87,36	64	4300	6
21	80218AC17	6218-2Z	90	160	30	2,2	101	71,5	3800	6
22	80220C17	6220-2Z	100	180	34	3,3	128	93	3400	6
23	80304AC17	6304-2Z	20	52	15	0,1	16,69	7,8	13000	7
24	6-80304AC17	6304-2ZP6	20	52	15	0,1	16,69	7,8	13000	7
25	80305AC17	6305-2Z	25	62	17	0,2	23,6	11,6	11000	6
27	80306C17	6306-2Z	30	72	19	0,3	28,1	14,6	9000	6
28	80307AC17	6307-2Z	35	80	21	0,4	34,86	19	8500	7
29	80308AC17	6308-2Z	40	90	23	0,7	42,3	24	7500	7

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH TWO SHIELDS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B	m	Dynamic	Static	Solid	
30	70-80308AC17	6308-2ZC3	40	90	23	0,7	42,3	24	7500	7
31	80309C17	6309-2Z	45	100	25	0,9	55,33	31,5	6700	6
32	80310AC17	6310-2Z	50	110	27	1,1	64,89	38	6300	6
33	70-80310AC17	6310-2ZC3	50	110	27	1,1	64,89	38	6300	6
34	80311C17	6311-2Z	55	120	29	1,4	75,07	45	5600	6
35	80312C17	6312-2Z	60	130	31	1,7	86	52	5000	6
36	80313AC17	6313-2Z	65	140	33	2,1	96,61	60	4800	7
37	80314AC17	6314-2Z	70	150	35	2,6	109,2	68	4500	7
38	80315AC17	6315-2Z	75	160	37	3,1	117,6	76,5	4300	7
39	70-80315AC17	6315-2ZC3	75	160	37	3,1	117,6	76,5	4300	7
40	80317AC17	6317-2Z	85	180	41	4,5	139,65	96,5	3600	7
41	76-80317AC9	6317-2ZP63	85	180	41	4,5	139,65	96,5	3600	7
42	80902C17		16	35	14	0,1	7,8	3,6	14000	7
43	6-280114AC23		70	110	20	0,68	39,59	31	6000	-

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SHIELD AND GROOVE ON OUTER RING

Single row deep groove ball bearings with shield and groove on outer ring simplify design of the unit, mounting-dismounting operations during bearing assembly and necessity in technical maintenance of bearings.

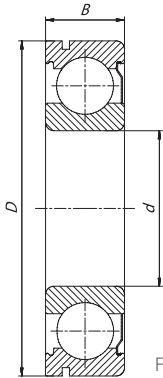


Fig. 8

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		m	Dynamic	Static	
1	150207A	6207-ZN	35	72	17	0,3	26,77	15,3	9000	8
2	150208A	6208-ZN	40	80	18	0,4	33,6	19	8500	8
3	150210	6210-ZN	50	90	20	0,5	35,1	23,2	7000	8
4	150212	6210-ZN	60	110	22	0,8	54,6	31	6000	8
5	150217A	6217-ZN	85	150	28	1,8	87,1	64	4300	8
6	150306	6306-ZN	30	72	19	0,3	28,1	14,6	9000	8
7	150307A	6307-ZN	35	80	21	0,4	34,86	19	8500	8
8	150308A	6308-ZN	40	90	23	0,7	42,3	24	7500	8
9	150309	6309-ZN	45	100	25	0,8	55,3	31,5	6700	8
10	150310A	6310-ZN	50	110	27	1,1	64,89	38	-	8
11	150311A	6311-ZN	55	120	29	1,4	75,07	45	5600	8

SINGLE ROW BALL BEARINGS WITH ONE-SIDED SEAL

Bearings with seals (usually reinforced rubber washers installed in outer ring of bearing and contact with inner ring) are produced for operation in extra dusty environment. Sometimes bearing seal consists of the set of metal washers and rubber-coated fabric. Seals hold grease in bearing and prevent ingress of foreign particles inside bearing cavity.

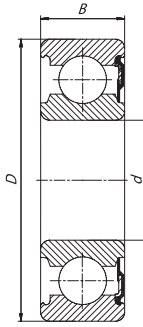


Fig. 9

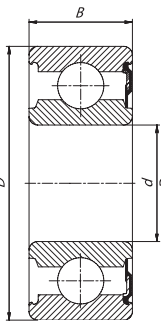


Fig. 10

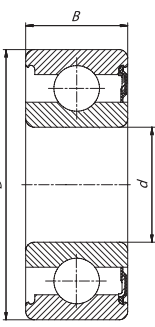


Fig. 11

SINGLE ROW BALL BEARINGS WITH ONE-SIDED SEAL

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		Dynamic	Static	Solid	
1	20703K	65203-RS	17	40	14	0,07	9,5	4,5	4000	10
2	6-20703K	65203-RSP6	17	40	14	0,07	9,5	4,5	4000	10
3	20803K	65303-RS	17	47	15	0,1	14,3	6,5	3200	11
4	20803EK	65303-RST	17	47	15	0,1	14,3	6,5	3200	11
5	6-20803EK	65303-RSTP6	17	47	15	0,1	14,3	6,5	3200	11
6	160204A	6204-RS	20	47	14	0,1	13,33	6,5	10000	9
7	6-160204A	6204-RSP6	20	47	14	0,1	13,33	6,5	10000	9
8	160205A	6205-RS	25	52	15	0,1	14,7	6,95	8500	9
9	160206A	6206-RS	30	62	16	0,2	20,47	11,2	7500	9
10	160207A	6207-RS	35	72	17	0,3	26,77	15,3	6300	9
11	160208	6208-RS	40	80	18	0,34	33,6	19	8000	9
12	6-160212A	6212-RSP6	60	110	22	0,7	54,6	31	6000	9
13	1160304K		20	52	18	0,16	16,69	7,8	8500	9
14	1160305		25	62	21	0,27	23,6	11,6	8500	9

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SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL

Bearings with seals (usually reinforced rubber washers installed in outer ring of bearing and contact with inner ring) are produced for operation in extra dusty environment. Sometimes bearing seal consists of the set of metal washers and rubber-coated fabric. Seals hold grease in bearing and prevent ingress of foreign particles inside bearing cavity.



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

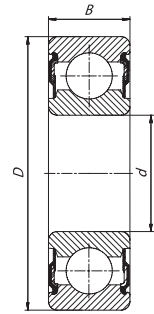


Fig. 12

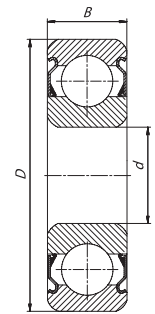


Fig. 13

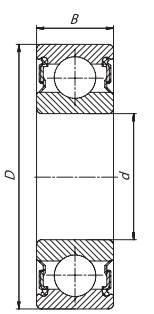


Fig. 14

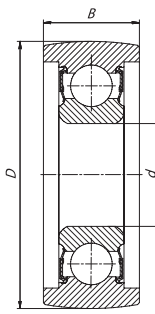


Fig. 15

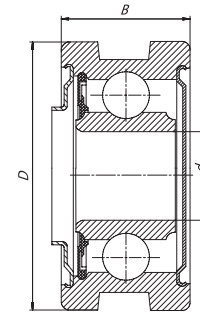


Fig. 16

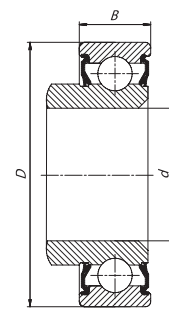


Fig. 17

SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		m	Dynamic	Static	
1	180204AC17	6204-2RS	20	47	14	0,1	13,33	6,5	10000	12
2	180204AC9	6204-2RS	20	47	14	0,1	13,33	6,5	10000	12
3	 180204AK10C17		20	47	14	0,1	13,33	6,5	10000	13
4	6-180204AC17	6204-2RSP6	20	47	14	0,1	13,33	6,5	10000	12
5	6-180204AC9Щ1	6204-2RSP6	20	47	14	0,1	13,33	6,5	10000	12
6	6-180204AC17Щ2	6204-2RSP6	20	47	14	0,1	13,33	6,5	10000	12
7	70-180204AC17	6204-2RSC3	20	47	14	0,1	13,33	6,5	10000	12
8	76-180204AC9Щ1	6204-2RSP63	20	47	14	0,1	13,33	6,5	10000	12
9	76-180204AC17Щ2	6204-2RSP63	20	47	14	0,1	13,33	6,5	10000	12
10	180205AC17	6205-2RS	25	52	15	0,1	14,7	6,95	8500	12
11	 180205AK10C17		25	52	15	0,1	14,7	6,95	8500	13
12	6-180205AC9Щ1	6205-2RSP6	25	52	15	0,1	14,7	6,95	8500	12
13	6-180205AC17Щ1	6205-2RSP6	25	52	15	0,1	14,7	6,95	8500	12
14	70-180205AC17	6205-2RSC3	25	52	15	0,1	14,7	6,95	8500	12
15	76-180205AC17	6205-2RSP63	25	52	15	0,1	14,7	6,95	8500	12
16	76-180205AC9Щ2Y	6205-2RSP63	25	52	15	0,1	14,7	6,95	8500	14
17	180206AC9	6206-2RS	30	62	16	0,2	19,5	11,2	7500	12
18	180206AC17	6206-2RS	30	62	16	0,2	19,5	11,2	7500	12
19	 180206AK10C17		30	62	16	0,2	19,5	11,2	7500	13
20	6-180206AC9	6206-2RSP6	30	62	16	0,2	19,5	11,2	7500	12
21	70-180206AC17	6206-2RSC3	30	62	16	0,2	19,5	11,2	7500	12
22	76-180206AC9Щ2Y	6206-2RSP63	30	62	16	0,2	19,5	11,2	7500	14
23	180207AC17	6207-2RS	35	72	17	0,3	27	15,3	6300	12
24	180207AC17Щ	6207-2RS	35	72	17	0,3	27	15,3	6300	12
25	 180207AK10C17		35	72	17	0,3	27	15,3	6300	13
26	6-180207AC17	6207-2RSP6	35	72	17	0,3	27	15,3	6300	12
27	180208C17	6208-2RS	40	80	18	0,4	33,6	19	8000	12
28	6-180208C17	6208-2RSP6	40	80	18	0,4	33,6	19	8000	12
29	70-180208C17	6208-2RSC3	40	80	18	0,4	33,6	19	8000	12
30	180210C17	6210-2RS	50	90	20	0,5	35,1	23,2	7000	12
31	180211AC17	6211-2RS	55	100	21	0,6	45,78	29	6300	12
32	1180211AC17		55	100	23	0,7	45,78	29	6300	12
33	180212AC17	6212-2RS	60	110	22	0,8	54,6	31	6000	12
34	180217AC17	6217-2RS	85	150	28	1,8	87,36	64	4300	12
35	6-180217AC17	6217-2RSP6	85	150	28	1,8	87,36	64	4300	12
36	180304AC9	6304-2RS	20	52	15	0,1	16,69	7,8	14000	12
37	180304AC17	6304-2RS	20	52	15	0,1	16,69	7,8	14000	12
38	6-180304AC17	6304-2RSP6	20	52	15	0,1	16,69	7,8	14000	12
39	70-180304AC17	6304-2RSC3	20	52	15	0,1	16,69	7,8	14000	12
40	1180304AC9		20	52	18	0,16	16,69	7,8	14000	12
41	6-1180304AC9		20	52	18	0,16	16,69	7,8	14000	12

SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL

	№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
										Type of grease	
		GOST	DIN	d	D	B	m	Dynamic	Static	Solid	
	42	180305AC17	6305-2RS	25	62	17	0,2	23,6	11,6	8500	12
	43	180305AC17LJ	6305-2RS	25	62	17	0,2	23,6	11,6	8500	12
	44	6-180305AC17	6305-2RSP6	25	62	17	0,2	23,6	11,6	8500	12
	45	6-180305AC9LJ1	6305-2RSP6	25	62	17	0,2	23,6	11,6	8500	12
	46	70-180305AC17	6305-2RSC3	25	62	17	0,2	23,6	11,6	8500	12
	47	76-180305AC9LJ1	6305-2RSP63	25	62	17	0,2	23,6	11,6	8500	12
AUTO	48	1180305AC9		25	62	21	0,27	23,6	11,6	8500	12
	49	6-1180305AC9		25	62	21	0,27	23,6	11,6	8500	12
	50	180306K3C17	6306-2RS	30	72	19	0,3	28,1	14,6	6300	12
	51	180306K3VC17	6306-2RS	30	72	19	0,3	28,1	14,6	6300	12
AUTO	52	6-180306K3C17	6306-2RSP6	30	72	19	0,3	28,1	14,6	6300	12
	53	6-180306K3VC17LJ	6306-2RSP6	30	72	19	0,3	28,1	14,6	6300	12
	54	6-180306K3VL20LJ	6306-2RSP6	30	72	19	0,3	28,1	14,6	6300	12
	55	76-180306K3C9LJ2V	6306-2RSP63	30	72	19	0,3	28,1	14,6	6300	12
	56	76-180306K3C17LJ2	6306-2RSP63	30	72	19	0,3	28,1	14,6	6300	12
AGRO	57	 180306K10C17		30	72	19	0,3	28,1	14,6	6300	13
	58	180307C17	6307-2RS	35	80	21	0,4	34,86	19	6000	12
	59	70-180307C17	6307-2RSC3	35	80	21	0,4	34,86	19	6000	12
	60	76-180307AC9LJ2V	6307-2RSP63	35	80	21	0,4	34,86	19	6000	12
	61	180308C17	6308-2RS	40	90	23	0,6	42,3	24	7500	12
	62	6-180308C17	6308-2RSP6	40	90	23	0,6	42,3	24	7500	12
	63	70-180308C17	6308-2RSC3	40	90	23	0,6	42,3	24	7500	12
	64	180309C17	6309-2RS	45	100	25	0,8	55,33	31,5	6700	12
	65	6-180309C17	6309-2RSP6	45	100	25	0,8	55,33	31,5	6700	12
	66	76-180309C9LJ1	6309-2RSP63	45	100	25	0,8	55,33	31,5	6700	12
	67	76-180309C9LJ2V	6309-2RSP63	45	100	25	0,8	55,33	31,5	6700	12
AGRO	68	 180309AK10C17		45	100	25	0,8	55,33	31,5	6700	13
	69	180310AC17	6310-2RS	50	110	27	1,2	64,89	38	6300	12
	70	180312C17	6312-2RS	60	130	31	1,76	86	52	5000	12
	71	6-180312C9	6312-2RSP6	60	130	31	1,76	86	52	5000	12
	72	180316AC17	6316-2RS	80	170	39	3,6	130,2	86,5	3800	12
AGRO	73	180503C17	62203-2RS	17	40	16	0,1	10,4	4,7	12000	12
	74	6-180503C17	62203-2RSP6	17	40	16	0,1	10,4	4,7	12000	12
	75	180504C17	62204-2RS	20	47	18	0,1	13,33	6,5	10000	12
	76	6-180504C17	62204-2RSP6	20	47	18	0,1	13,33	6,5	10000	12
	77	180505VC17LJ	62205-2RS	25	52	18	0,15	14,7	6,95	8500	12
	78	6-180505VC17	62205-2RSP6	25	52	18	0,15	14,7	6,95	8500	12
AUTO	79	6-180505VC17LJ1	62205-2RSP6	25	52	18	0,15	14,7	6,95	8500	12
	80	180508AC17	62208-2RS	40	80	23	0,5	33,6	19	5600	12
	81	6-180508AC17	62208-2RSP6	40	80	23	0,5	33,6	19	5600	12
AUTO	82	6-180508V120LJ	62208-2RSP6	40	80	23	0,5	33,6	19	5600	12
	83	6-180508AKV120LJ	62208-2RSP6	40	80	23	0,5	33,6	19	5600	12

SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		Dynamic	Static	Solid	
84	180603C17	62303-2RS	17	47	19	0,2	13,5	6,5	11000	12
85	6-180603C17	62303-2RSP6	17	47	19	0,2	13,5	6,5	11000	12
86	180604C17	62304-2RS	20	52	21	0,2	15,9	7,8	9500	12
87	180605AC9	62305-2RS	25	62	24	0,3	23,6	11,6	7500	12
88	180605AC17	62305-2RS	25	62	24	0,3	23,6	11,6	7500	12
89	6-180605C17	62305-2RSP6	25	62	24	0,3	23,6	11,6	7500	12
90	6-180605AC9Ш1	62305-2RSP6	25	62	24	0,3	23,6	11,6	7500	12
91	76-180605AC9Ш1	62305-2RSP63	25	62	24	0,3	23,6	11,6	7500	12
92	180606C9	62306-2RS	30	72	27	0,5	28,1	14,6	6300	12
93	180606C17	62306-2RS	30	72	27	0,5	28,1	14,6	6300	12
94	6-180606C17	62306-2RSP6	30	72	27	0,5	28,1	14,6	6300	12
95	180607C9	62307-2RS	35	80	31	0,6	34,86	19	5600	12
96	180607C17	62307-2RS	35	80	31	0,6	34,86	19	5600	12
97	6-180607C9	62307-2RSP6	35	80	31	0,6	34,86	19	5600	12
98	6-180607C17	62307-2RSP6	35	80	31	0,6	34,86	19	5600	12
99	180608C9	62308-2RS	40	90	33	0,9	42,3	24	5000	12
100	180608C17	62308-2RS	40	90	33	0,9	42,3	24	5000	12
101	6-180608C9	62308-2RSP6	40	90	33	0,9	42,3	24	5000	12
102	180609AC9	62309-2RS	45	100	36	1,2	55,33	31,5	6700	12
103	6-180609C9	62309-2RSP6	45	100	36	1,2	55,33	31,5	6700	12
104	76-180609AC9Ш1	62309-2RSP63	45	100	36	1,2	55,33	31,5	6700	12
105	180610C17	62310-2RS	50	110	40	1,6	64,89	38	6300	12
106	6-180610C17	62310-2RSP6	50	110	40	1,6	64,89	38	6300	12
107	180612AC17	62312-2RS	60	130	46	2,46	86	52	5000	12
108	180706KC17		30	78	28	0,53	28,1	14,6	6300	15
109	180707C17		35	80	23	0,5	34,86	19	6000	12
110	 180712AK10C17		60	110	24	0,85	54,6	31	6000	13
111	 180902C17		16	35	14	0,06	7,8	3,6	14000	12
112	 180902EC17		16	35	14	0,06	7,8	3,6	14000	12
113	70-140803AC17		17	46	20	0,2	9,5	4,5	20000	16
114	76-520806K1YL19Ш1		31	55	19	0,14	11,2	7,4	3200	17
115	76-520806EK1YL19Ш1		31	55	19	0,14	11,2	7,4	3200	17
116	2180120AEC17		100	150	30	1,5	63,52	54	4300	-
117	76-180206AK1C9Ш2V	6206-2RSP63	30	62	16	0,2	19,5	11,2	7500	14
118	 180208AK10C17		40	80	18	0,4	33,6	19	8000	13
119	 180308AK10C17		40	90	23	0,6	42,3	24	7500	13
120	 180310AK10C17		50	110	27	1,2	64,89	38	6300	13
AT THE DEVELOPMENT STAGE										
121	76-180205AK1C9Ш2V	6205-2RSP63	25	52	15	0,1	14,7	6,95	8500	14
122	 1180211AK10C17		55	100	23	0,6	45,78	29	6300	13
123	76-180306K1C9Ш2V	6306-2RSP63	30	72	19	0,3	28,1	14,6	6300	14
124	 180610AK10C17		50	110	40	1,6	64,89	38	6300	13

SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		Dynamic	Static	Solid	
125	76-180312AK1C9Щ2V	6312-2RSP63	60	130	31	1,76	86	52	5000	14
126	76-180315AK1C9Щ2V	6315-2RSP63	75	160	37	3,1	117,6	76,5	4300	14

SINGLE ROW BALL BEARINGS WITH DOUBLE-SIDED SEAL AND GROOVE ON OUTER RING

Bearings with groove on outer ring for retaining ring are produced on the basis of single row deep groove ball bearings. Application of bearing with double-sided seal and groove simplifies design of the unit and mounting-dismounting operations during its assembly. Bearings with seals (usually reinforced rubber washers installed in outer ring of bearing and contact with inner ring) are produced for operation in extra dusty environment.

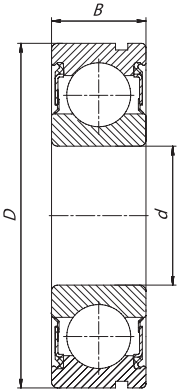


Fig. 18

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		Dynamic	Static	Solid	
1	6-750305W54Щ2		25	62	17	0,224	23,6	11,6	8500	18
2	6-750306AKYW54Щ1		30	72	19	0,339	28,1	14,6	6300	18
3	6-750706AKYW54Щ1		30	75	19	0,386	33	17,85	8000	18

AUTO

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SEALS AND ADAPTER SLEEVE

Single row ball bearings with seals on adapter sleeve are intended for assembling on smooth shafts. Seals hold grease in bearing and prevent ingress of foreign particles inside bearing cavity.



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

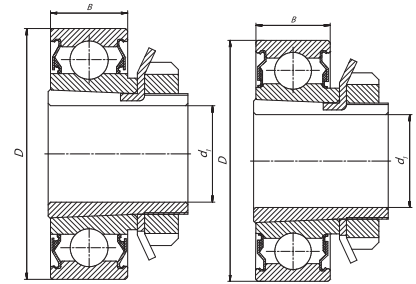


Fig. 19

Fig. 19a

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		m	Dynamic	Static	
1	380706T2C17		30	85	23	0,7	32,5	18	5800	19a
2	380707T2C17		35	85	23	0,7	32,5	18	5800	19a
3	380708T2C17		40	85	23	0,7	32,5	18	5800	19a
4	380708ET2C17		40	85	23	0,7	32,5	18	5800	19a
5	 380708K10T2C17		40	85	23	0,7	32,5	18	5800	19
6	 380708EK10T2C17		40	85	23	0,7	32,5	18	5800	19
AT THE DEVELOPMENT STAGE										
7	 380706K10T2C17		30	85	23	0,7	32,5	18	5800	19
8	 380707K10T2C17		35	85	23	0,7	32,5	18	5800	19

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE INNER RING, SPHERICAL MOUNTING SURFACE OF OUTER RING AND LOCKING PIN ON INNER RING

Such design allows to self-aligning of bearing within certain limits without prejudice to the performance during skew of bearing rings due to misalignment of mounting areas or shaft deflection caused by workloads. Seals hold gease and prevent penetration of foreign particles inside its cavity.



All bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

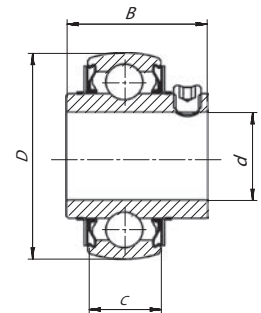


Fig. 20

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE INNER RING, SPHERICAL MOUNTING SURFACE OF OUTER RING AND LOCKING PIN ON INNER RING

AGRO

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B/C	m	Dynamic	Static	Solid	
1	480205AEHK10T2C17-UC205	UC205	25	52	34,1/16	0,2	14,7	7,9	8500	20
2	480206EHK10T2C17-UC206	UC206	30	62	38,1/18	0,3	19,5	11,3	7500	20
3	480207EHK10T2C17-UC207	UC207	35	72	42,9/20	0,47	25,7	15,3	6300	20
4	480208EHK10T2C17-UC208	UC208	40	80	49,2/21	0,6	32,6	19,8	5000	20
5	480209EHK10T2C17-UC209	UC209	45	85	49,2/21	0,66	32,8	20,5	5000	20
6	480210EHK10T2C17-UC210	UC210	50	90	51,6/23	0,75	35,1	23,3	4800	20

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SPHERICAL MOUNTING SURFACE OF OUTER RING WITH SEALS

Spherical ball bearings are self-aligning ball bearings. The main basic modification of this type is single row spherical bearing with spherical mounting surface of outer ring and seals. Such design performs self-aligning of bearing in some limits without performance degradation during skew of bearing rings due to misalignment of mounting seats or shaft deflection caused by working loads. Seals hold grease in bearing and prevent ingress of foreign particles inside bearing cavity.



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

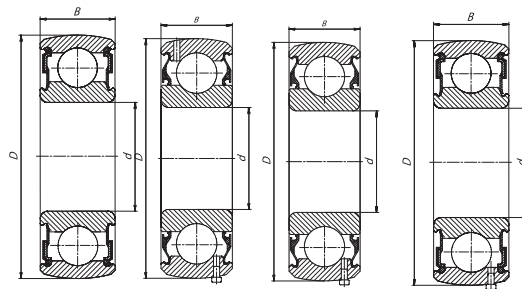


Fig. 21

Fig. 22

Fig. 22a

Fig. 23

AGRO

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B	m	Dynamic	Static	Solid	
1	580204AK10C17		20	47	14	0,1	13,33	6,5	10000	22a
2	580205AC17	76205-2RS	25	52	15	0,1	14,7	6,95	8500	21
3	580205AEC17	76205-2RST	25	52	15	0,1	14,7	6,95	8500	21
4	580205AEK7C17	76205-2RST	25	52	15	0,1	14,7	6,95	8500	23
5	580205AK7C17	76205-2RS	25	52	15	0,1	14,7	6,95	8500	23
6	580306C17	76306-2RS	30	72	19	0,3	28,1	14,6	9000	21
7	580306K7C17	76306-2RS	30	72	19	0,3	28,1	14,6	9000	23
8	1580206EK7C17		30	62	18	0,2	19,5	11,25	7500	23
9	1580206EC17		30	62	18	0,2	19,5	11,25	7500	21
10	1580206C17		30	62	18	0,2	19,5	11,25	7500	21

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SPHERICAL MOUNTING SURFACE OF OUTER RING WITH SEALS

AGRO

11	 1580206EK10T2C17		30	62	18	0,2	19,5	11,25	7500	22a
12	1580207EK1T2C17		35	72	20	0,3	26,77	15,3	6300	21
13	1580207K1T2C17		35	72	20	0,3	26,77	15,3	6300	21
14	1580207EK7T2C17		35	72	20	0,3	26,77	15,3	6300	23
15	1580207K7T2C17		35	72	20	0,3	26,77	15,3	6300	23
16	 1580207EK10T2C17		35	72	20	0,3	26,77	15,3	6300	22a
17	1580209T2C17		45	85	21	0,4	34,86	21,6	5000	21
18	1580209K7T2C17		45	85	21	0,4	34,86	21,6	5000	23
19	1580209EK7T2C17		45	85	21	0,4	34,86	21,6	5000	23
20	 1580209EK10T2C17		45	85	21	0,4	34,86	21,6	5000	22a
21	 1580211EHK10T2C17		55	100	23	0,7	45,78	29	4300	22
22	 580205AEK10C17		25	52	15	0,1	14,7	6,95	8500	22a
AT THE DEVELOPMENT STAGE										
23	 580306K10C17		30	72	19	0,3	28,1	14,6	9000	22a

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SPHERICAL MOUNTING SURFACE OF OUTER RING WITH SEALS ON ADAPTER SLEEVE

Spherical ball bearings are self-aligning ball bearings. The main basic modification of this type is single row spherical bearing with spherical mounting surface of outer ring and seals. Such design performs self-aligning of bearing in some limits without performance degradation during skew of bearing rings due to misalignment of mounting seats or shaft deflection caused by working loads. Seals hold grease in bearing and prevent ingress of foreign particles inside bearing cavity.



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

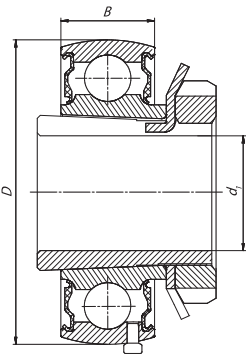


Fig. 24

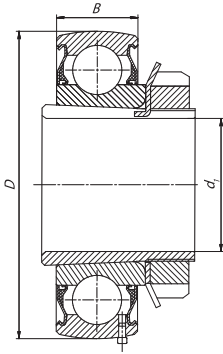


Fig. 25

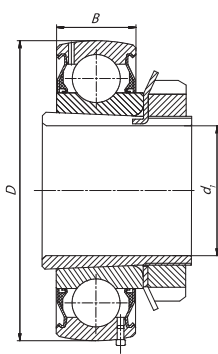


Fig. 25a

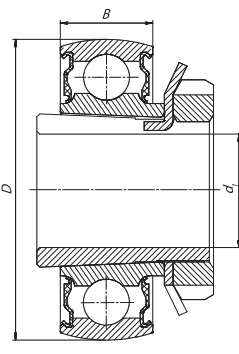


Fig. 26

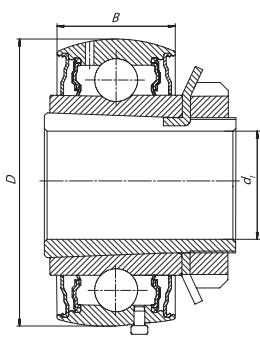


Fig. 27

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH SPHERICAL MOUNTING SURFACE OF OUTER RING WITH SEALS ON ADAPTER SLEEVE

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B		Dynamic	Static	Type of grease	
1	680210A2HK7C17		50	100	25	1,2	45,5	29,6	4300	27
2	 680210AEHK10C17		50	100	25	1,2	45,78	29	4300	25a
3	680314EHK7C17		70	150	39	3,6	71	53	3000	27
4	1680204AC17		20	52	16	0,2	14,7	6,95	8500	26
5	1680204AK7C17		20	52	16	0,2	14,7	6,95	8500	24
6	1680204AEK7C17		20	52	16	0,2	14,7	6,95	8500	24
7	1680204AEC17		20	52	16	0,2	14,7	6,95	8500	26
8	 1680204AK10C17		20	52	16	0,2	14,7	6,95	8500	25
9	 1680204AEK10C17		20	52	16	0,2	14,7	6,95	8500	25
10	1680205K7T2C17		25	62	18	0,3	19,5	11,25	7500	24
11	1680205EK7T2C17		25	62	18	0,3	19,5	11,25	7500	24
12	1680205ET2C17		25	62	18	0,3	19,5	11,25	7500	26
13	 1680205EK10T2C17		25	62	18	0,3	19,5	11,25	7500	25
14	1680206T2C17		30	72	20	0,4	26,77	15,3	6300	26
15	1680206K7T2C17		30	72	20	0,4	26,77	15,3	6300	24
16	1680206EK7T2C17		30	72	20	0,4	26,77	15,3	6300	24
17	 1680206EK10T2C17		30	72	20	0,4	26,77	15,3	6300	25
18	1680207K7T2C17		35	80	21	0,6	33,6	19	5000	24
19	1680207EK7T2C17		35	80	21	0,6	33,6	19	5000	24
20	 1680207EK10T2C17		35	80	21	0,6	33,6	19	5000	25
21	1680208T2C17		40	85	21	0,7	34,86	21,6	5000	26
22	1680208ET2C17		40	85	21	0,7	34,86	21,6	5000	26
23	1680208EK7T2C17		40	85	21	0,7	34,86	21,6	5000	24
24	 1680208EK10T2C17		40	85	21	0,7	34,86	21,6	5000	25

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE INNER RING, SPHERICAL MOUNTING SURFACE OF OUTER RING AND ECCENTRIC LOCKING RING

Such design allows to self-aligning of bearing within certain limits without prejudice to the performance during skew of bearing rings due to misalignment of mounting areas or shaft deflection caused by workloads. Seals hold gease and prevent penetration of foreign particles inside its cavity.



All bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE INNER RING, SPHERICAL MOUNTING SURFACE OF OUTER RING AND ECCENTRIC LOCKING RING

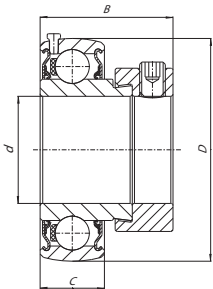


Fig. 28

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B/C		Dynamic	Static	Type of grease	
1	780205KAEHK10T2C17-ES205	YET205-2F	25	52	31/15	0,2	14,7	7,87	8500	28
2	780206KEHK10T2C17-ES206	YET206-2F	30	62	35,7/18	0,32	19,5	11,3	7500	28
3	780207KEHK10T2C17-ES207	YET207-2F	35	72	38,9/19	0,52	25,7	15,32	6300	28
4	780208KEHK10T2C17-ES208	YET208-2F	40	80	43,7/21	0,64	32,6	19,8	5000	28

SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE SYMMETRIC INNER RING, SPHERICAL MOUNTING SURFACE OF OUTER RING AND ECCENTRIC LOCKING RING

Such design allows to self-aligning of bearing within certain limits without prejudice to the performance during skew of bearing rings due to misalignment of mounting areas or shaft deflection caused by workloads. Seals hold gease and prevent penetration of foreign particles inside its cavity.



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K10 in additional bearing designation), allowing the bearing to operate in dust environment.

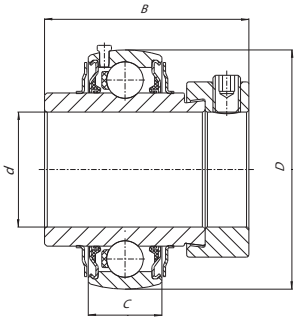


Fig. 29

**SINGLE ROW DEEP GROOVE BALL BEARINGS WITH DOUBLE-SIDED SEAL, WITH WIDE SYMMETRIC INNER RING,
SPHERICAL MOUNTING SURFACE OF OUTER RING AND ECCENTRIC LOCKING RING**

AGRO

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B/C		Dynamic	Static	Type of grease Solid	
1	780716EHK7C17	-	80	150	39	4,6	71	53	3000	29
2	 780207EHK10T2C17-EX207	YEL207-2F	35	72	51,1/20	0,61	25,7	15,32	6300	29
3	 780205AEHK10T2C17-EX205	YEL205-2F	25	52	44,4/16	0,24	14,7	7,87	8500	29
4	 780206AEHK10T2C17-EX206	YEL206-2F	30	62	48,4/18	0,39	19,5	11,3	7500	29
5	 780210AEHK10T2C17-EX210	YEL210-2F	50	90	76,2/23	1,05	35,1	23,3	4800	29

DOUBLE ROW SPHERICAL BALL BEARINGS

Spherical ball bearings are self-aligning ball bearings. The main basic modification of this type is double row spherical bearing of non-separable design which has inner ring with two raceways and outer ring with one spherical raceway.

Such design performs self-aligning of bearing in some limits without performance degradation during skew of bearing rings due to misalignment of mounting seats or shaft deflection caused by working loads.

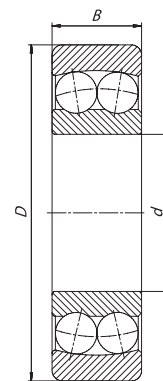


Fig. 30

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	1203	1203	17	40	12	0,07	8	2,7	18000	22000	30
2	1204	1204	20	47	14	0,12	10	3,5	15000	18000	30
3	1205	1205	25	52	15	0,14	12,2	4,4	13000	16000	30
4	1206	1206	30	62	16	0,23	15,6	6,2	10000	13000	30
5	1207	1207	35	72	17	0,3	16	7	9000	11000	30
6	1208	1208	40	80	18	0,4	19,3	8,8	8500	10000	30
7	1209	1209	45	85	19	0,5	22	10	7500	9000	30
8	1210	1210	50	90	20	0,5	22,8	11	7000	8500	30

DOUBLE ROW SPHERICAL BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
9	1211	1211	55	100	21	0,7	27	13,7	6300	7500	30
10	1212	1212	60	110	22	0,9	30	16	5600	6700	30
11	1213	1213	65	120	23	1,2	31	17,3	5300	6300	30
12	1215	1215	75	130	25	1,4	39	21,6	4800	5600	30
13	1216	1216	80	140	26	1,7	40	23,6	4500	5300	30
14	1217	1217	85	150	28	2,1	49	28,5	4000	4800	30
15	1218	1218	90	160	30	2,6	57	32	3800	4500	30
16	1300	1300	10	35	11	0,06	7,2	2,1	18000	22000	30
17	1301	1301	12	37	12	0,07	9,5	2,8	18000	22000	30
18	1303	1303	17	47	14	0,13	12,5	4,2	14000	17000	30
19	1304	1304	20	52	15	0,2	12,5	4,4	12000	15000	30
20	1305	1305	25	62	17	0,3	18	6,7	9500	13000	30
21	1306	1306	30	72	19	0,4	21,2	8,5	9000	11000	30
22	6-1306	1306P6	30	72	19	0,4	21,2	8,5	9000	11000	30
23	1307	1307	35	80	21	0,5	25	10,6	7500	9000	30
24	6-1307	1307P6	35	80	21	0,5	25	10,6	7500	9000	30
25	1308	1308	40	90	23	0,7	29	12,9	6700	8000	30
26	1309	1309	45	100	25	0,9	38	17	6300	7500	30
27	1310	1310	50	110	27	1,3	41,5	19,3	5600	6700	30
28	1311	1311	55	120	29	1,6	51	24	5000	6000	30
29	1312	1312	60	130	31	1,8	57	28	4500	5300	30
30	1313	1313	65	140	33	2,4	62	31	4300	5000	30
31	1314	1314	70	150	35	3	75	37,5	4000	4800	30
32	1315	1315	75	160	37	3,6	78,3	40,5	3800	4500	30
33	1506	2206	30	62	20	0,3	15,3	6,1	9500	12000	30
34	1507	2207	35	72	23	0,4	21,6	8,8	8500	10000	30
35	1508	2208	40	80	23	0,5	22,5	9,5	7500	9000	30
36	1512KV	2212	60	110	28	1,1	34	17,3	5600	6700	30
37	1605	2305	25	62	24	0,35	24,5	8,5	9500	12000	30
38	1606	2306	30	72	27	0,5	31,2	11,4	8500	10000	30
39	1607	2307	35	80	31	0,7	39	14,6	7000	8500	30
40	1608	2308	40	90	33	0,9	45	17,6	6300	7500	30
41	1609E	2309T	45	100	36	1,2	54	19,4	5600	6700	30
42	1610	2310	50	110	40	1,6	63,7	26,5	5300	6300	30
43	1611	2311	55	120	43	2,1	75	31,5	4500	5600	30
44	1612	2312	60	130	46	2,6	86,5	37,5	4000	5000	30
45	1613	2313	65	140	48	3,2	95	43	3600	4500	30

DOUBLE ROW SPHERICAL BALL BEARINGS WITH ADAPTER SLEEVE

Spherical ball bearings are self-aligning ball bearings. The main basic modification of this type is double row spherical bearings with adapter sleeve for assembling on smooth shafts. Such design performs self-aligning of bearing in some limits without performance degradation during skew of bearing rings due to misalignment of mounting seats or shaft deflection caused by working loads.

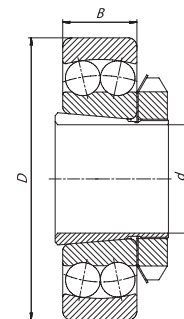


Fig. 31

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	11204K	1205K+H205	20	52	26	0,2	12,2	4	13000	16000	31
2	11205K	1206K+H206	25	62	27	0,3	15,6	6,2	10000	13000	31
3	11206K	1207K+H207	30	72	29	0,5	16	7	9000	11000	31
4	11207K	1208K+H208	35	80	31	0,6	19,3	8,8	8500	10000	31
5	11208	1209K+H209	40	85	33	0,7	22	10	7500	9000	31
6	11209	1210K+H210	45	90	35	0,8	22,8	11	7000	8500	31
7	11210K1	1211K+H211	50	100	37	1	27	13,7	6300	7500	31
8	11211	1212K+H212	55	110	38	1,2	30	16	5600	6700	31
9	11212K	1213K+H213	60	120	40	1,6	31	17,3	5300	6300	31
10	11213	1215K+H215	65	130	43	2,1	39	21,6	4800	5600	31
11	11214	1216K+H216	70	140	46	2,6	40	23,6	4500	5300	31
12	11215	1217K+H217	75	150	50	3,1	48,8	28,5	4000	4800	31
13	11216	1218K+H218	80	160	52	3,7	57	32	3800	4500	31
14	11305K	1306K+H306	25	72	31	0,5	21,2	8,5	9000	11000	31
15	11306K	1307K+H307	30	80	35	0,7	25	10,6	7500	9000	31
16	11307K	1308K+H308	35	90	36	0,9	29	12,9	6700	8000	31
17	11308	1309K+H309	40	100	39	1,2	38	17	6300	7500	31
18	11309	1310K+H310	45	110	42	1,5	41,5	19,3	5600	6700	31
19	11310K1	1311K+H311	50	120	45	1,9	50,7	24	5000	6000	31
20	11311	1312K+H312	55	130	47	2,4	57	28	4500	5300	31
21	11312K	1313K+H313	60	140	50	2,8	62	31	4300	5000	31
22	11312EK	1313K+H313T	60	140	50	2,8	62	31	4300	5000	31
23	11313	1315K+H315	65	160	55	4,4	79,3	40,5	3800	4500	31
24	11314E	1316K+H316T	70	170	59	5	88,4	42	3600	4300	31
25	11316K	1318K+H318	80	190	65	6,9	117	56	3200	3800	31
26	11505K	2206K+H306	25	62	31	0,4	15,3	6,1	9500	12000	31
27	11506K	2207K+H307	30	72	35	0,6	21,6	8,8	8500	10000	31
28	11605K	2306K+H2306	25	72	38	0,5	21,2	8,5	9000	11000	31
29	11606K	2207K+H2307	30	80	43	0,8	37,9	12,9	7000	8500	31
30	11609	2310K+H2310	45	110	55	1,9	63,7	26,5	5300	6300	31
31	11611	2312K+H2312	55	130	62	3	86,5	33	4000	5000	31

DOUBLE ROW SPHERICAL BALL BEARINGS WITH TAPERED BORE

Spherical ball bearings are self-aligning ball bearings. The main basic modification of this type is double row spherical bearings with tapered bore for assembling on smooth shafts. Such design performs self-aligning of bearing in some limits without performance degradation during skew of bearing rings due to misalignment of mounting seats or shaft deflection caused by working loads.

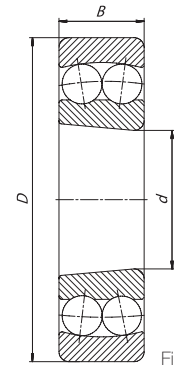


Fig. 32

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	111205	1205K	25	52	15	0,14	12,2	4,4	13000	16000	32
2	111206	1206K	30	62	16	0,23	15,6	6,2	10000	13000	32
3	111207	1207K	35	72	17	0,3	16	7	9000	11000	32
4	111208	1208K	40	80	18	0,4	19,3	8,8	8500	10000	32
5	111209	1209K	45	85	19	0,4	22	10	7500	9000	32
6	111210	1210K	50	90	20	0,5	22,8	11	7000	8500	32
7	111211	1211K	55	100	21	0,7	27	13,7	6300	7500	32
8	111212	1212K	60	110	22	0,8	30	16	5600	6700	32
9	111213	1213K	65	120	23	1,1	31	17,3	5300	6300	32
10	111215	1215K	75	130	25	1,3	39	21,6	4800	5600	32
11	111216	1216K	80	140	26	1,7	40	23,6	4500	5300	32
12	111217	1217K	85	150	28	2	49	28,5	4000	4800	32
13	111218	1218K	90	160	30	2,4	57	32	3800	4500	32
14	111306	1306K	30	72	19	0,4	21,2	8,5	9000	11000	32
15	111307	1307K	35	80	21	0,5	25	10,6	7500	9000	32
16	111308	1308K	40	90	23	0,7	29	12,9	6700	8000	32
17	111309	1309K	45	100	25	0,9	38	17	6300	7500	32
18	111310	1310K	50	110	27	1,2	41,5	19,3	5600	6700	32
19	111311	1311K	55	120	29	1,5	51	24	5000	6000	32
20	111312	1312K	60	130	31	1,7	57	28	4500	5300	32
21	111313	1313K	65	140	33	2,4	62	31	4300	5000	32
22	111315	1315K	75	160	37	3,6	78,3	40,5	3800	4500	32
23	111318	1318K	90	190	43/45	5,6	117	56	3200	3800	32
24	111506	2206K	30	62	20	0,3	15,3	6,1	9500	12000	32
25	111507	2207K	35	72	23	0,4	21,6	8,8	8500	10000	32
26	111606	2306K	30	72	27	0,5	31,2	11,4	8500	10000	32
27	111607	2307K	35	80	31	0,423	39	14,6	7000	8500	32
28	111608	2308K	40	90	33	0,9	45	17,6	6300	7500	32
29	111610	2310K	50	110	40	1,6	63,7	26,5	5300	6300	32

DOUBLE ROW SPHERICAL BALL BEARINGS WITH TAPERED BORE

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
30	111611	2311K	55	120	43	2,1	75	31,5	4500	5600	32
31	111612	2312K	60	130	46	2,5	86,5	37,5	4000	5000	32
32	111613	2313K	65	140	48	3,2	95	43	3600	4500	32

ANGULAR CONTACT BALL BEARINGS

Angular contact bearings are applied in assemblies with combined loads. Depending on radial and axial load ratio it is used either single bearing with the corresponding bearing contact angle or assembled bearing consisting of several single bearings (in case of necessity to increase load rating of the assembly).



Most of the bearings with such design are manufactured with X-SHIELD sealings which have improved hermeticity (with suffix K12, K14 in additional bearing designation), allowing the bearing to operate in dust environment.

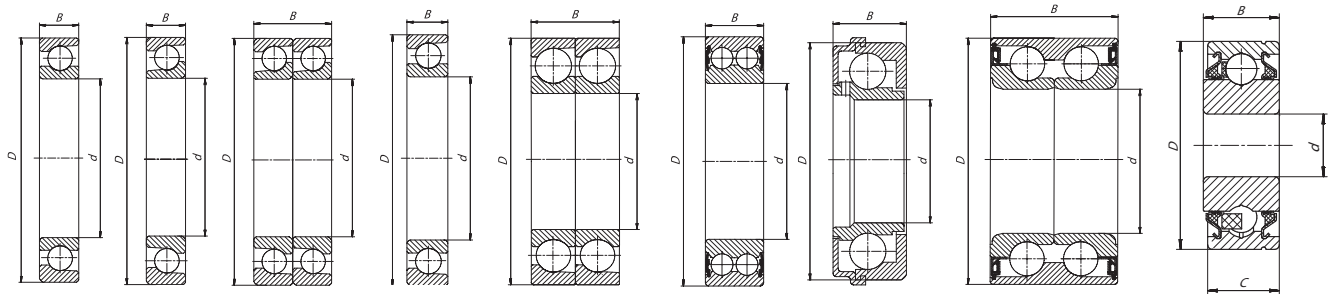


Fig. 33

Fig. 34

Fig. 35

Fig. 36

Fig. 37

Fig. 38

Fig. 39

Fig. 40

Fig. 41

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
1	46118A	B7018E	90	140	24	1,13	57	47,2	4800	6300	33
2	46120A	B7020E	100	150	24	1,26	75,07	55,1	4300	5600	33
3	6-46122Л		110	170	28	2,32	97,96	73,5	4000	5300	33
4	6-46124Л		120	180	28	2,48	104,07	80,8	3600	4800	33
5	6-46126Л		130	200	33	3,74	130,64	103	3200	4500	33
6	6-46320Л		100	215	47	8,55	212,38	177	2400	3400	33
7	6-66322Л	7322BMPP6	110	240	50	11,49	234,61	190	2000	3000	36
8	6-46207AE1Ш1		35	72	17	0,28	27,05	16,4	9000	11000	33
9	26305K	7305B	25	62	17	0,3	26	15	9500	14000	34
10	6-26305K	7305BP6	25	62	17	0,3	26	15	9500	14000	34

ANGULAR CONTACT BALL BEARINGS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm		Fig. №
									Type of grease		
	GOST	DIN	d	D	B		m	Dynamic	Static	Solid	
11	426305K	7305BUA	25	62	34	0,5	44,5	28,6	7500	10000	35
12	6-426305K	7305BUAP6	25	62	34	0,5	44,5	28,6	7500	10000	35
13	26315Л	7315BMP	75	160	37	3,5	125	98	3400	4500	34
14	6-26315Л	7315BMPP6	75	160	37	3,5	125	98	3400	4500	34
15	426315Л	7315BMPUA	75	160	74	7,1	210	174	3200	4000	35
16	6-426315Л	7315BMPUAP6	75	160	74	7,1	210	174	3200	4000	35
17	66409Д	7409LB	45	120	29	1,6	81,6	51	4000	5000	36
18	466409Л		45	120	58	3,6	132,2	102	3200	4300	37
19	966907K1C		36	62	16	0,2	-	-	-	-	38
20	6-256907AE1K1C17		34	64	37	0,5	40	27,8	7000	-	40
21	 6-256907AEK12L20		34	64	37	0,5	40	27,8	7000	-	40
22	 6-256907AEK12L19		34	64	37	0,5	40	27,8	7000	-	40
23	 376905EKL19-AA205DD		16	53,086	18,288/19,4	0,22	14	7,88	500	-	41
AT THE DEVELOPMENT STAGE											
24	 6-256907AEK14L19		34	64	37	0,5	40	27,8	7000	-	40

SINGLE ROW DEEP GROOVE BALL BEARING WITH SYMMETRIC EXTENDED INNER RING AND THREE-LIP DOUBLE-SIDED SEAL

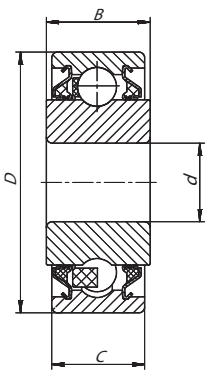


Fig. 42

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B/C	m	Dynamic	Static	Type of grease	
									Solid	
AT THE DEVELOPMENT STAGE										
1	 530903EL19-203KRR.AH02	-	16,26	40	18,29/12	0,09	10,1	4,75	13000	42

SINGLE ROW DEEP GROOVE BALL BEARING WITH X-SHIELD DOUBLE-SIDED SEAL AND SPHERICAL MOUNTING SURFACE OF OUTER RING, INNER RING FOR HEXAGONAL SHAFT

Bearings with hexagonal bore are designed mainly for transfer of high torque. Bore has positive tolerance which simplify mounting and dismounting of the bearing. Axial bearings fixation on the shaft is performed by means of interfacing parts. Standard design provides convex spherical outer surface of outer ring and absence of grease bores.

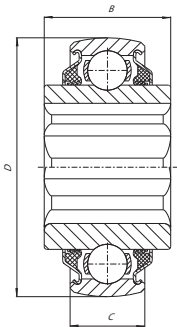


Fig. 43

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B/C	m	Dynamic	Static	Solid	
AT THE DEVELOPMENT STAGE										
1	 420905EL19-205 KRRB2		22,25	52	25,4/15	0,2	14*	7,8*	900*	43

*Reference information

CYLINDRICAL ROLLER BEARINGS WITH SHORT ROLLERS

Cylindrical roller bearings with short rollers are mainly designed to the same aims as single row deep groove ball bearings, but they used in assemblies with bigger radial loads. Design of these bearings provides compensation (within certain limits) of errors of axial sizes during assemble mounting and excludes axial jamming of bearings at thermal expansion of shaft or body in working mode. These bearings can work at high rotational speed.

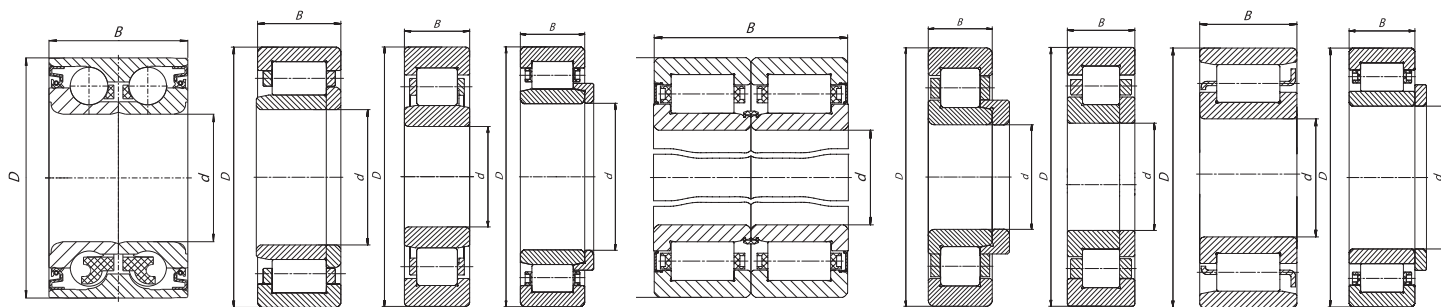


Fig. 40

Fig. 41

Fig. 42

Fig. 43

Fig. 44

Fig. 45

Fig. 46

Fig. 47

Fig. 48

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		m	Dynamic	Static	
1	70-32417M	NU417MC3	85	210	52	10,4	332	351	3600	42
2	80-32417M	NU417MC4	85	210	52	10,4	332	351	3600	42
3	H0-62417E1M*	NJ417PHA+HJ417	85	210	52/66	9,82	332	351	3600	45
4	H0-62417K1M*	NJ417M+HJ417	85	210	52/66	10,6	332	351	3600	45
5	H0-92417E1M*	NUP417PHA	85	210	52	10,5	332	351	3600	46
6	H0-92417K2M*	NUP417M	85	210	52	10,5	332	351	3600	46
7	70-32419M	NU419MC3	95	240	55	13,5	419	443	3200	42
8	H0-32419M*	NU419M	95	240	55	13,5	419	443	3200	42
9	H0-32419E1M*	NU419PHA	95	240	55	12,4	419	443	3200	42
10	2320M	N320M	100	215	47	8,15	303	313	2800	47
11	76-32320M	NU320P63MA	100	215	47	8,48	296	348	2800	42
12	2222M	N222M	110	200	38	5,08	229	250	3000	47
13	2322M	N322M	110	240	50	12,07	401	467	3000	47
14	32322M	NU322M	110	240	50	12,3	401	467	3000	42
15	20-32322M	NU322MC2	110	240	50	12,3	401	467	3000	42
16	70-32322M	NU322MC3	110	240	50	12,3	401	467	3000	42
17	76-32322M	NU332P63M	110	240	50	11,5	401	467	3000	42
18	80-32322M*	NU322MC4	110	240	50	12,3	401	467	3000	42
19	42322M	NJ322M	110	240	50	12,51	401	467	3000	40

* Bearings are used in railway transport units

CYLINDRICAL ROLLER BEARINGS WITH SHORT ROLLERS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
									Type of grease	
	GOST	DIN	d	D	B		Dynamic	Static	Solid	
20	2224M	N224M	120	215	40	6,29	284	374	2800	47
21	32224M	NU224M	120	215	40	6,2	284	374	2800	42
22	2324M	N324M	120	260	55	15,4	504	593	1600	47
23	32324M	NU324M	120	260	55	15,06	504	593	1600	42
24	42324M	NJ324M	120	260	55	15,22	504	593	1600	40
25	70-32424M	NU424MC3	120	310	72	29,6	695	805	1900	42
26	H0-32424M*	NU424M	120	310	72	29,6	695	805	1900	42
27	30-42724ЛМ*		120	240	80	18,2	548	713	1800	40
28	30-232724ЛМ*		120	240	80/81,2	18,2	548	713	1800	41
29	2226AM	N226EM	130	230	40	7,26	320	390	2600	47
30	2326M	N326M	130	280	58	18,4	603	716	2000	47
31	32326M	NU326M	130	280	58	18,27	603	716	2000	42
32	42326M	NJ326M	130	280	58	18,55	603	716	2000	40
33	30-32726Л1М*		130	250	80	18,5	554	722	1800	42
34	30-42726E2M*		130	250	80	17,14	584	774	1800	40
35	30-42726Л4M*		130	250	80	18,9	554	722	1800	40
36	36-42726E2M*		130	250	80	17,14	584	774	1800	40
37	30-232726E2M*		130	250	80/81,2	17,14	584	774	1800	41
38	30-232726Л4M*		130	250	80/81,2	18,9	554	722	1800	41
39	36-232726E2M*		130	250	80/81,2	17,14	584	774	1800	41
40	H6-82726E2K1MYC43*		130	250	160/161,2	34,956	1001	1548	1800	44
41	H6-82726E2K1MYC44*		130	250	160/161,2	34,956	1001	1548	1800	44
42	H6-82726E2K1MYC45*		130	250	160/161,2	34,956	1001	1548	1800	44
43	2228M	N228M	140	250	42	8,64	318	411	2400	47
44	32228M	NU228M	140	250	42	13,88	318	411	2400	42
45	42228M	NJ228M	140	250	42	13,98	318	411	2400	40
46	70-42428M	NJ428MC3	140	360	82	48,8	905	1046	1700	40
47	H0-42428M*	NJ428M	140	360	82	48,8	905	1046	1700	40
48	30-42728EM*		140	260	80	18,18	625	833	1800	40
49	30-42728Л4M*		140	260	80	19,9	625	833	1800	40
50	30-232728EM*		140	260	80/81,2	18,16	625	833	1800	41
51	30-232728Л4M*		140	260	80/81,2	19,9	625	833	1800	41
52	H0-32330EM*		150	320	65	24,3	675	777	2300	42
53	H0-32330MY1*	NU330M	150	320	65	26,8	675	777	2300	42
54	H0-42330EM*		150	320	65	24,3	675	777	2300	40
55	H0-42330Л1М*		150	320	65	26,96	675	777	2300	40
56	H0-62330M*	NJ330M+HJ330	150	320	80	29,83	675	777	2300	45
57	30-32630ЛМ*		150	320	108	43,2	1090	980	1700	42
58	30-42630ЛМ*	NJ2330M	150	320	108	44,6	1090	980	1700	40
59	30-52630ЛМ*		150	320	108/123	46,2	1090	980	1700	43
60	H0-32332AM1*		160	340	68	31,4	865	1060	2000	42
61	30-32532EM*		160	290	80	22,4	809	957	1800	42

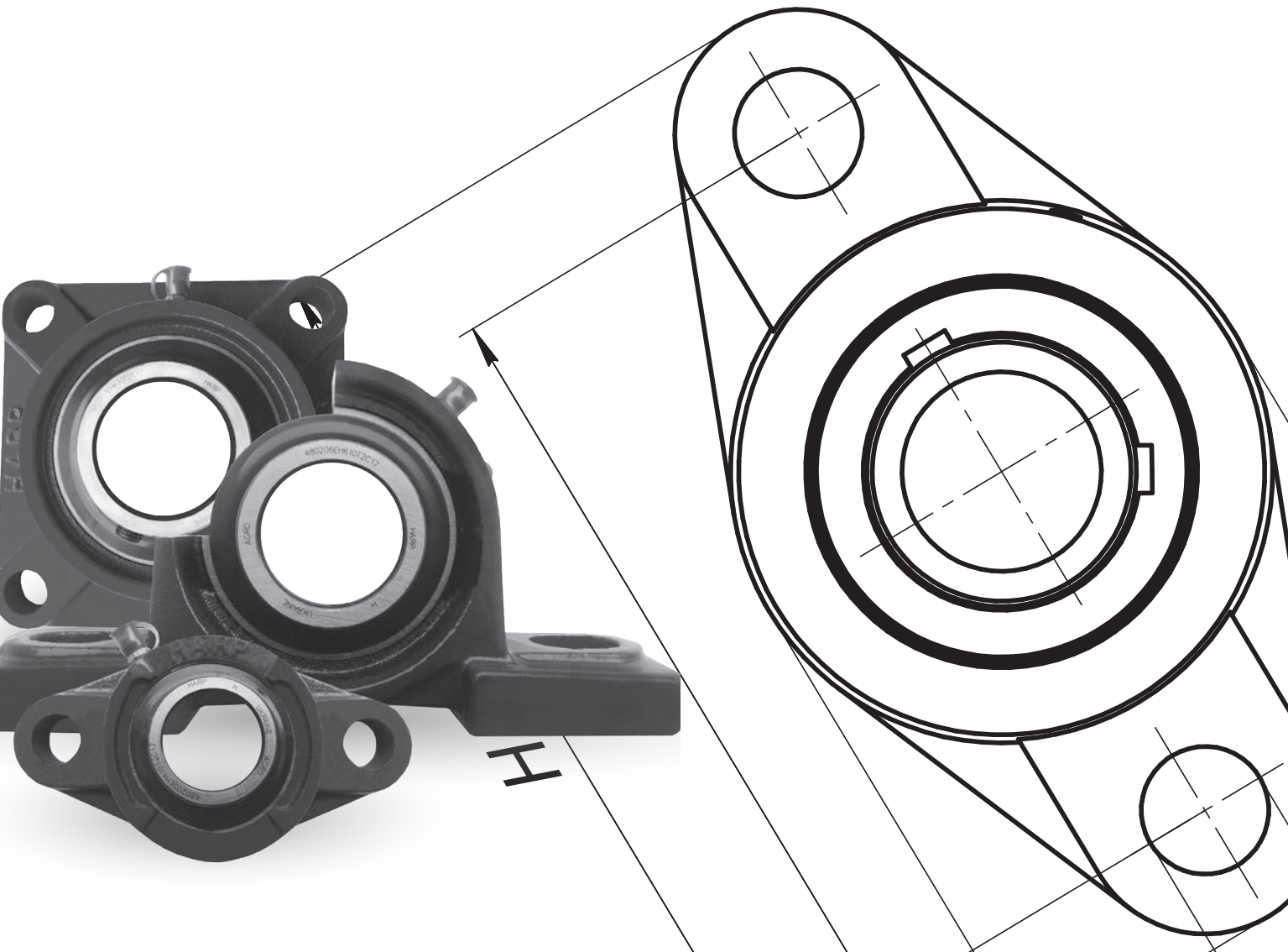
* Bearings are used in railway transport units

CYLINDRICAL ROLLER BEARINGS WITH SHORT ROLLERS

№	Bearing designation		Overall dimensions, mm			Weight, kg	Load ratings, kN		Max. rotational speed, rpm	Fig. №
	GOST	DIN	d	D	B		Dynamic	Static	Type of grease	
62	30-32532П1М*	NU223ECMA	160	290	80	24,5	809	957	1800	42
63	30-42532П1М*		160	290	80	25	809	957	1800	40
64	30-152532EM*		160	290	80/94	23,93	809	957	1800	48
65	30-152532П1М*		160	290	80/94	26	809	957	1800	48
66	30-32732ПМ*		160	320	108	41,7	1090	1211	1800	42
67	30-52732ПМ*		160	320	123	44,6	1090	1211	1800	43
68	180-32134ПМ		170	260	42	8,62	302	434	2200	42
69	30-42536EM*		180	320	86	28,9	1010	1094	1600	40
70	30-42536ПМ*	NJ2236ECMA	180	320	86	31,8	1010	1094	1600	40
71	30-52536EM*	NU2236PHAC3+HJ2236EC	180	320	86	30,3	1010	1094	1600	43
72	30-52536ПМ*	NU2236ECMA+HJ2236EC	180	320	86	33,1	1010	1094	1600	43
73	30-152536EM*		180	320	86/100	23,93	1010	1094	1700	48
74	30-152536ПМ*		180	320	86/100	33	1010	1094	1600	48
75	30-152536ПМУ*		180	320	86/100	33,4	1010	1094	1700	48
76	30-42836ПМУ*		180	320	86	31,8	1010	1094	1700	40
77	80-32140Л4*	NU1040MAC4	200	310	51	15	430	626	1900	42
78	80-92140Л3М*	NUP1040MAC4	200	310	51	15,76	430	626	1900	46
79	80-32152ПМ*	NU1052MAC4	260	400	65	29,16	627	1070	1800	42
80	80-92152ПМ*	NUP1052MAC4	260	400	65	30,6	627	1070	1800	46

* Bearings are used in railway transport units

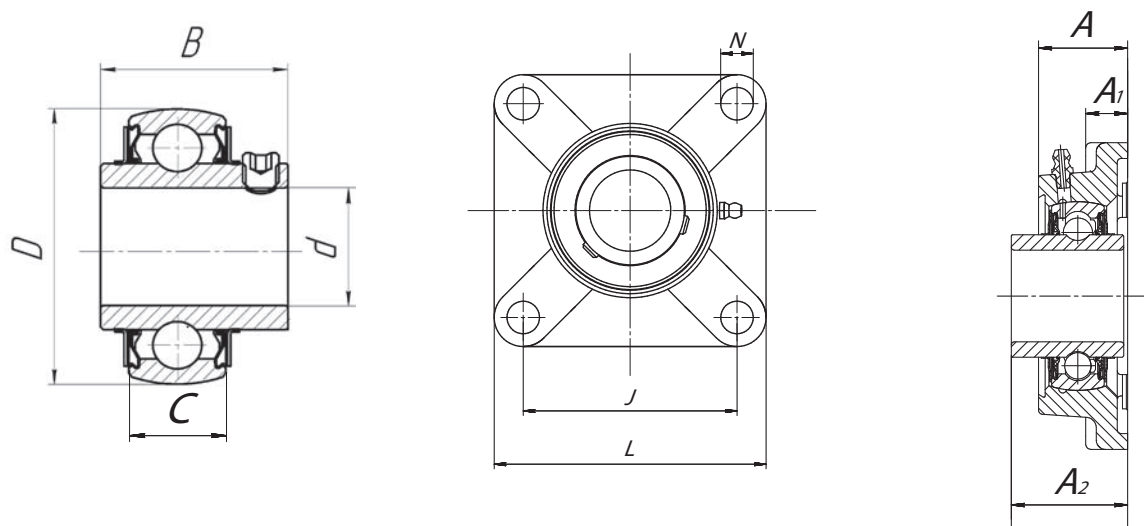
HARP Bearing units



SPECIFICATIONS OF THE UCF BEARING UNITS

UCF — series of bearing units with the square flanged housings made of grey cast iron SCh20, which consist of the UC-series ball bearings (single row ball bearings with two X-SHIELD® sealings, with wide inner ring and spherical mounting surface of the outer ring, with locking pin on the inner ring) and F-series flanged housings. Besides standard seals units can be assembled with protective covers made of pressed steel or cast iron, open or closed.

№	Designation of HARP bearing units DIN/ GOST	Designation of HARP bearing	Bearing overall dimensions, mm			Mass, kg	Loading capacity, kN		Run-away speed, r/min. Grease type
			d	D	B/C		Dynamic	Static	
1	F480205 –UCF205	480205AEHK10T2C17–UC205 	25	52	34,1/16	0,2	14,7	7,9	8500
2	F480206–UCF206	480206EHK10T2C17–UC206 	30	62	38,1/18	0,3	19,5	11,3	7500
3	F480207–UCF207	480207EHK10T2C17–UC207 	35	72	42,9/20	0,47	25,7	15,3	6300
4	F480208–UCF208	480208EHK10T2C17–UC208 	40	80	49,2/21	0,6	32,6	19,8	5000
5	F480209–UCF209	480209EHK10T2C17–UC209 	45	85	49,2/21	0,66	32,8	20,5	5000
6	F480210–UCF210	480210EHK10T2C17–UC210 	50	90	51,6/23	0,75	35,1	23,3	4800



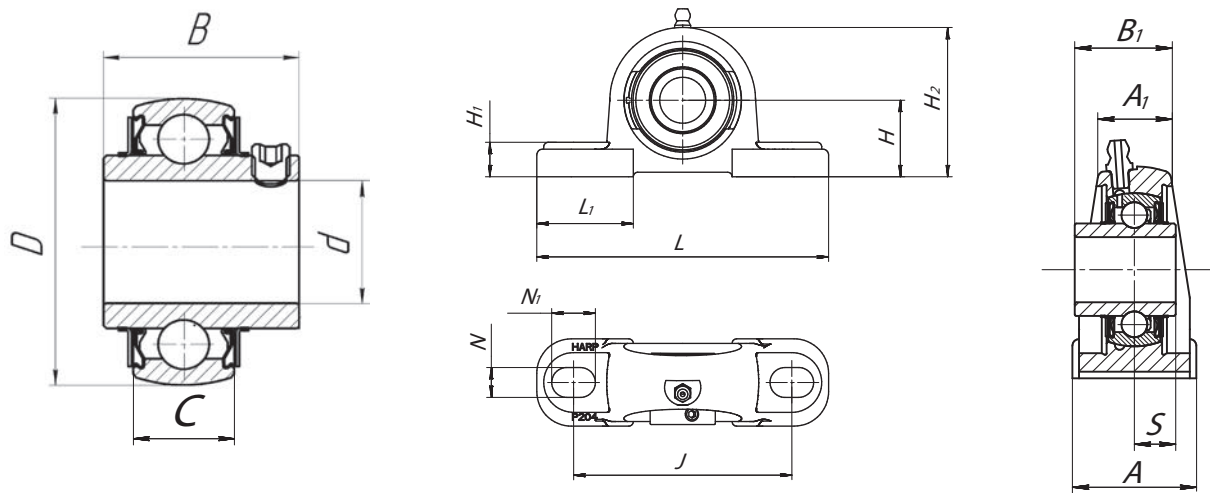
Housings overall dimensions, mm

L	J	A	A1	A2	e	N	B1	S	D1
95	70	27	13	35.8	16	12	34,1	14,3	34
108	83	31	13	40,2	18	12	38.1	15,9	40.3
117	92	34	16	44.4	19	14	42,9	17	48
130	102	36	16	51.2	21	16	49.2	19	53
137	105	38	16	52,2	22	16	49,2	19	57,2
143	111	40	17	54.6	22	16	51,6	19	61,8

SPECIFICATIONS OF THE UCP BEARING UNITS

UCP — series of bearing units, which consist of the UC-series ball bearings (single row ball bearings with two X-SHIELD® sealings, with wide inner ring and spherical mounting surface of the outer ring, with locking pin on the inner ring) and P-series housings. Housing is made of SCh20 grey cast iron. UCP is one of the most common series, products with such marking are used in the various equipment and mechanisms. Main characteristic feature is the small distance between the housing center and base.

№	Designation of HARP bearing units DIN/ GOST	Designation of HARP bearing	Bearing overall dimensions, mm			Mass, kg	Loading capacity, kN		Run-away speed, r/min. Grease type
			d	D	B/C		Dynamic	Static	
1	P480205-UCP205	480205AEHK10T2C17-UC205 	25	52	34.1/16	0.2	14,7	7,9	8500
2	P480206-UCP206	480206EHK10T2C17-UC206 	30	62	38.1/18	0.3	19,5	11,3	7500
3	P480207-UCP207	480207EHK10T2C17-UC207 	35	72	42.9/21	0.47	25,7	15,3	6300
4	P480208-UCP208	480208EHK10T2C17-UC208 	40	80	49.2/21	0.6	32,6	19,8	5000
5	P480209-UCP209	480209EHK10T2C17-UC209 	45	85	49.2/21	0.66	32,8	20,5	5000
6	P480210-UCP210	480210EHK10T2C17-UC210 	50	90	51.6/23	0.75	35,1	23,3	4800



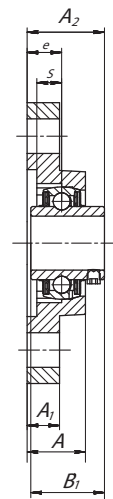
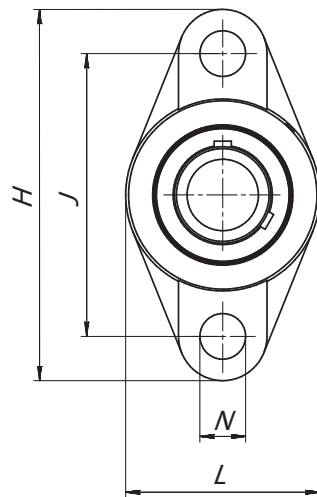
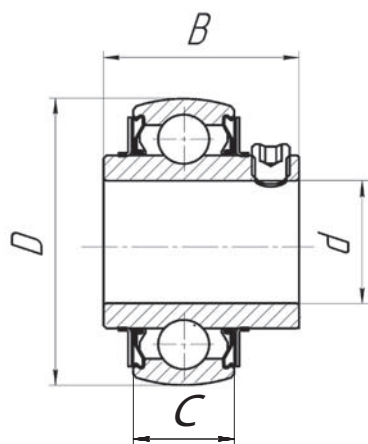
Housings overall dimensions, mm

L	H	A	A1	J	N	N1	L1	H1	H2	B1	S
140	36.5	38	26	105	13	19	42	16	70	34.1	14,3
165	42.9	48	30	121	17	21	54	18	83	38.1	15,9
167	47.6	48	31	127	17	21	54	19	94	42.9	17,5
184	49.2	54	34	137	17	23	52	19	100	49,2	19
190	54	54	37	146	17	23	60	20	108	49.2	19
206	57,2	60	39	159	20	25	65	22	114	51.6	19

SPECIFICATIONS OF THE UCFL BEARING UNITS

UCFL — designation of bearing units with oval flanged housings made of SCh grey cast iron, which consist of UC-series ball bearings (single row ball bearings with two X-SHIELD® sealings, with wide inner ring and spherical mounting surface of the outer ring, with locking pin on the inner ring with locking pin on the inner ring) and FL-series oval flanged housings. They are usually installed vertically, relatively light and save space in the units of machinery and equipment (e.g. conveyors). Main characteristic feature is mounting with only two bolts.

№	Designation of HARP bearing units DIN/ GOST	Designation of HARP bearing	Bearing overall dimensions, mm			Mass, kg	Loading capacity, kN		Run-away speed, r/min. Grease type
			d	D	B/C		Dynamic	Static	
1	FL480205-UCFL205	480205AEHK10T2C17-UC205 	25	52	34.1/16	0,2	14,7	7,9	8500
2	FL480206-UCFL206	480206EHK10T2C17-UC206 	30	62	38.1/18	0,3	19,5	11,3	7500
3	FL480207-UCFL207	480207EHK10T2C17-UC207 	35	72	42.9/20	0,47	25,7	15,3	6300
4	FL480208-UCFL208	480208EHK10T2C17-UC208 	40	80	49.2/21	0,6	32,6	19,8	5000
5	FL480209-UCFL209	480209EHK10T2C17-UC209 	45	85	49.2/21	0,66	32,8	20,5	5000
6	FL480210-UCFL210	480210EHK10T2C17-UC210 	50	90	51.6/23	0,75	35,1	23,3	4800



Housings overall dimensions, mm

L	H	J	A	A1	A2	e	N	B1	S
68	130	99	27	13	35.8	16	16	34.1	14,3
80	148	117	31	13	40.2	18	16	38.1	15,9
90	161	130	34	14	44.4	19	16	42,9	17,5
100	175	144	36	14	51,2	21	16	49,2	19
108	188	148	38	16	52,2	22	19	49,2	19
115	197	157	40	16	54,6	22	19	51,6	19

GREASE AND ITS TYPES

Rolling bearings in modern units and mechanisms work in various conditions: different rotational speed, unequal loads received by bearing units, wide range of working temperatures, different types of grease and methods of bearing lubrication.

One of the main factors which define operability of bearings under different modes is type and characteristic of grease used in specific conditions. Grease is a substance imbedded between contact surfaces of bearing to decrease friction and wear, prevent seizure, rejection of heat generated on contact surface.

Four main methods of bearing application can be selected in modern mechanical engineering.

These methods depend on the type of grease: fluid oil, semisolid grease, solid grease, lubrication by liquid products with corrosive nature.

Grease in rolling bearings has the following key functions:

Generation of required elastohydrodynamic oil film between working surfaces. Oil film simultaneously cushions the impacts of rolling bodies with rings and cage which cause the increase of bearing life and decrease of operational noise; decreases friction of bearing during its operation within specified conditions, works as cooling body which cause both cooling of bearing in whole and distribution of generated heat across all components of bearing; protects bearing parts against corrosion; prevents ingress of outdoor contaminants inside bearing.

The majority of bearing units use fluid oils and semisolid grease.

SEMISOLID GREASE

Semisolid grease is a salve-like grease generated due to thickening of grease oil by different thickeners. Thickener creates structural frame in grease. This frame, consisting from bound fibers, gives ductility for grease and retains grease oil in the cells.

The widest application obtained soap grease where fatty acid soaps act as thickeners and mineral oils – as oil. Some special greases are prepared on the basis of synthetic oils or mixture of synthetic and mineral oils with the application of various organic and inorganic substances as thickener.

Semisolid greases are basically used for the lubrication of rolling bearings. In these greases mineral oil is thickened by sodium, calcium or lithium soaps. Lithium greases have the biggest application for bearings with shields and seal washers.

DESIGNATION OF SEMISOLID GREASE FOR SEALED BEARINGS

Designation of grease in bearing	Name of grease
-	TSIATIM-201
C1	OKB-122-7
C2	TSIATIM-221
C3	VNIINP-210
C4	TSIATIM-221C
C5	TSIATIM-202
C6	PFMS-4C
C7	VNIINP-271
C8	VNIINP-235
C9	L3-31
C10	N ₂ 158
C11	SIOL
C12	VNIINP-260
C13	VNIINP-281
C14	FIOL--2Y
C15	VNIINP-207
C16	VNIINP-246
C17	Litol-24
C18	VNIINP-233
C20	VNIINP-274
C21	ERA
C22	SVEM
C23	SHRUS-4
C24	CEDA
C25	INDA
C26	LDS-3
C27	Litol-24+5%FANOL
C28	SHEVRON SR1
C29	ROBOTEMP
C30	YUNOLA
C31	LITIN 2
C32	N ₂ 158 M
C33	FIOL-2MP
C34	SHRUS-4M
C35	BERUTOX FE 18 EP
C36	BH14
C37	MC 1000
C38	MC 1000T
C39	Metallplex-P
C40	VNIINP-559
C41	ELMA
C43	BUKSOL
C44	KLUBERPLEX BEM 41-132
C45	MOBILTH SHC 221
C46	MARIOL-250
L19	CHEVRON SRI GREASE NLGI 2
L20	BERUTOX FE 18 EP
W54	HIGH-LUB LM 2 EP

GUIDELINES FOR GREASE APPLICATION IN SEALED BEARINGS

Area of application, type of product	Type of bearing	Temperature range, °C		Greases	Grease designation	Grease designation
		min.	max.			
Electric motors, generators	Single row deep groove ball bearings with two shields and double-sided seal	-40 -40 -50 -60 -20	100 120 120 150 180	Increased service life (20.000 hours) at temperature max. 100 °C.	Литол-24 (Litol-24) ЛЗ-31 (L3-31) ЛДС-3 (LDS-3), СВЭМ (SDEM), ЦИАТИМ-221 (TSIATIM-221), ВНИИНП-260 (VNIINP-260)	C17 C9 C26 C22 C2 C12
Automotive equipment, agricultural machines: -generators and water pumps	The same	-40	120	Service life – 10.000 hours.	ЛЗ-31 (L3-31)	C9
- clutches - wheel hubs, working mechanisms of agricultural machines, fan shafts - cardan units	Deep groove ball bearings, thrust bearings, thrust bearings with outside band, single row ball bearings with double-sided seal or two shields. Needle roller bearings for cardan shafts	-40 -40 -30	120 100 100	Increased service life (20.000 hours) at temperature max. 100 °C.	ЛЗ-31 (L3-31) ШРУС-4М (SHRUS-4M) ЛИТОЛ-24 (LITOL-24) №158М (No.158M) ФИОЛ-2МР (FIOL-2MR)	C9 C34 C17 C32 C33
Small size electric motors, etc.	Small single row deep groove ball bearings with two shields and double-sided seal	-60 -60 -60 -60 -60 -20	90 90 120 120 120 180	Increased service life. Inert atmosphere. Small friction torque. Relative pressure max. 1.3*Pa.	ЦИАТИМ-201 (TSIATIM-201) ОКБ-122-7 (OKB-122-7) ЭРА (ERA) ЦИАТИМ-221 (TSIATIM-221) ВНИИНП-271 (VNIINP-271) ВНИИНП-274 (VNIINP-274) ВНИИНП-260 (VNIINP-260)	- C1 C21 C2 C7 C20 C12
Electric units (motor starters, fans, etc.)	Single row deep groove ball bearings with double-sided seal	-60 -40 -60 -20	150 180 250 250		ЦИАТИМ-221 (TSIATIM-221) ВНИИНП-207 (VNIINP-207) ВНИИНП-246 (VNIINP-246) ВНИИНП-210 (VNIINP-210)	C2 C15 C16 C3
Units and systems with swinging movement	Single row ball or roller bearings with double-sided seal	-60 -60 -60 -30 -60 -30	120 150 180 250 250 300	Increased service life	ЭРА (ERA) ЦИАТИМ-221 (TSIATIM-221) ВНИИНП-207 (VNIINP-207) ВНИИНП-233 (VNIINP-233) ВНИИНП-235/246 (VNIINP-235/246) ПФМС-4С (PFMS-4S)	C21 C2 C15 C18 C8 / C16 C6
Electric spindle of textile machines	Single row deep groove ball bearings with two shields.		130		СИОЛ / ЮНОЛА (SIOL / YUNOLA)	C11 / C30
Conveyers, load trolleys, etc.	Bearings of 260000 series (single row deep groove ball bearings)		300		ИНДА (INDA)	C25

Area of application, type of product	Type of bearing	Temperature range, °C		Greases	Grease designation	Grease designation
		min.	max.			
Unsealed bearings		-30	180		BERUTOX FE 18 EP	C35
Bearings		-40			MC 1000 / MC 1000T	C37, C38
Heavy-duty bearings for rolling stock		-60	120		Металлплекс-П (Metallplex-P)	C39
High speed instrument bearings		-60	200		ВНИИНП-559 (VNIINP-559)	C40
Bearings for electric mechanisms		-60	300		ЭЛМА (ELMA)	C41
Bearings for rolling stock	H6-882726E2R1MYC44	-60	150		KLUBERPLEX BEM 41-132	C44
Bearings for rolling stock	H6-882726E2K1MYC45				MOBILTH SHC 221	C45
Bearings		-35	115		Мариол-250 (Mariol-250)	C46

Examples of the main characters for the bearings designation

Bearing 1180304 - single row deep groove ball bearing with double-sided seal				
1	18	0	3	04
series of width	alternate design	type of the bearing	series of diameters	designation of the bore diameter

Bearing 111211 - double row spherical ball bearing with tapered bore				
0	11	1	2	11
series of width	alternate design	type of the bearing	series of diameters	designation of the bore diameter

Bearing 1680209 - single row deep groove ball bearing with spherical mounting surface of outer ring with seals on adapter sleeve				
1	68	0	2	09
series of width	alternate design	type of the bearing	series of diameters	designation of the bore diameter

Bearing 305 - single row deep groove ball bearing				
0	00	0	3	05
series of width	alternate design	type of the bearing	series of diameters	designation of the bore diameter

Bearing 232726 - Deep groove roller bearing with short cylindrical rollers				
0	23	2	7	26
series of width	alternate design	type of the bearing	series of diameters	designation of the bore diameter

Bearing 901 - single row deep groove ball bearing with diameter 12.7 m (uncertain series)				
	00	0	9	01
	alternate design	type of the bearing	series of diameters is uncertain	designation of the bore diameter

Examples of the main characters for the bearings designation with additional characters

Bearing - single row deep groove ball bearing with double-sided seal					
7	6	180204	A	C17	III2
radial clearance according to the clearances group7	accuracy class 6	main designation	increased load capacity	Grease LITOL-24	Group of vibrating class

UPEC Industrial Group
Automotive Division

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