CERAMICSPEED BALL BEARINGS

KARL SCHUPP AG

CONDUCT – PROTECT – INSULATE



This is a highly resistant Ball Bearing that is particularly suitable for the use in heavily contaminated environments

CeramicSpeed XTREME

Description

One of the outstanding properties of this bearing is that, due to the extreme hardness of the balls, damage caused by contamination such as dust, metal abrasion, mineral fragments, etc. can be prevented. Damage can be prevented. As a result, the bearing offers high and long-lasting operational reliability even in contaminated environments.

Particles are crushed

Thanks to the extremely hard hybrid balls, the bearings in the Xtreme series are able to destroy penetrating contaminants without damaging the bearing. The bearing also offers very high resistance to water and cleaning agents, as silicon nitride does not corrode. The CeramicSpeed Xtreme series can also be specially manufactured and optimized for oscillating applications. These applications are found in special machines where bearings are required that do not perform a full rotation.

Angular contact ball bearing

In pumps, compressors and many motor designs with vertical shafts, the angular contact ball bearing can often be a solid mechanical solution. Like deep groove ball bearings, angular contact ball bearings are increasingly exposed to stray electrical currents, known as bearing currents. This problem is largely eliminated by the insulating ceramic balls of the Insulate series. Standard versions of angular contact ball bearings can be supplied ex works.

Advantages of CeramicSpeed Xtreme

- 4-8 times longer service life than conventional bearings
- Very high resistance to contamination, heat and dust
- Lower friction and operating temperature
- High-temperature-resistant versions available on request
- Prevents bearing current damage
- High speed stability

Data sheet CeramicSpeed Xtreme sealed

d	D (mm)	B	C (kN)	C0 (kN)	Limit speed (rpm)	Designation
6	19	6	2.34	0.95	24000	Xtreme 006 626-2RS/CSB
7	19	6	2.34	0.95	24000	Xtreme 007 607-2RS/CSB
7	22	7	3.45	1.37	22000	Xtreme 007 627-2RS/CSB
8	22	7	3.45	1.37	22000	Xtreme 008 608-2RS/CSB
10	26	8	4.75	1.96	19000	Xtreme 010 6000-2RS/CSB
10	30	9	5.40	2.36	17000	Xtreme 010 6200-2RS/CSB
10	35	11	8.52	3.4	15000	Xtreme 010 6300-2RS/CSB
12	28	8	5.40	2.36	17000	Xtreme 012 6001-2RS/CSB
12	32	10	7.28	3.1	15000	Xtreme 012 6201-2RS/CSB
12	37	12	10.10	4.15	14000	Xtreme 012 6301-2RS/CSB
15	32	9	5.85	2.85	14000	Xtreme 015 6002-2RS/CSB
15	35	11	8.06	3.75	13000	Xtreme 015 6202-2RS/CSB
15	42	13	11.90	5.4	12000	Xtreme 015 6302-2RS/CSB
17	35	10	6.37	3.25	13000	Xtreme 017 6003-2RS/CSB
17	40	12	9.95	4.75	12000	Xtreme 017 6203-2RS/CSB
17	47	14	14.30	6.55	11000	Xtreme 017 6303-2RS/CSB
20	42	12	9.95	5	11000	Xtreme 020 6004-2RS/CSB
20	47	14	13.5	6.55	10000	Xtreme 020 6204-2RS/CSB
20	52	15	16.8	7.8	9500	Xtreme 020 6304-2RS/CSB
25	47	12	11.9	6.55	9500	Xtreme 025 6005-2RS/CSB
25	52	15	14.8	7.8	8500	Xtreme 025 6205-2RS/CSB
25	62	17	23.4	11.6	7500	Xtreme 025 6305-2RS/CSB
30	55	13	13.8	8.3	8000	Xtreme 030 6006-2RS/CSB
30	62	16	20.3	11.2	7500	Xtreme 030 6206-2RS/CSB
30	72	19	29.6	16	6300	Xtreme 030 6306-2RS/CSB
35	62	14	16.8	10.25	7000	Xtreme 035 6007-2RS/CSB
35	72	17	27.0	15.3	6300	Xtreme 035 6207-2RS/CSB
35	80	21	35.1	19	6000	Xtreme 035 6307-2RS/CSB
40	68	15	17.8	11	6300	Xtreme 040 6008-2RS/CSB
40	80	18	32.5	19	5600	Xtreme 040 6208-2RS/CSB
40	90	23	42.3	24	5000	Xtreme 040 6308-2RS/CSB
45	75	23	20.8	14.6	5600	Xtreme 045 6009-2RS/CSB
45	85	19	35.1	21.6	5000	Xtreme 045 6209-2RS/CSB
45	100	25	55.3	31.5	4500	Xtreme 045 6309-2RS/CSB
50	80	16	22.9	15.6	5000	Xtreme 050 6010-2RS/CSB
50	90	20	37.1	23.2	4800	Xtreme 050 6210-2RS/CSB
50	110	27	65.0	38	4300	Xtreme 050 6310-2RS/CSB
55	90	18	29.6	21.2	4500	Xtreme 055 6011-2RS/CSB
55	100	21	46.2	29	4300	Xtreme 055 6211-2RS/CSB
55	120	29	74.1	45	3800	Xtreme 055 6311-2RS/CSB
60	95	18	30.7	23.2	4300	Xtreme 060 6012-2RS/CSB
60	110	22	55.3	36	4000	Xtreme 060 6212-2RS/CSB
60	130	31	85.2	52	3400	Xtreme 060 6312-2RS/CSB
65	100	18	31.9	25	4000	Xtreme 065 6013-2RS/CSB
65	120	23	58.5	40.5	3600	Xtreme 065 6213-2RS/CSB
65	140	33	97.5	60	3200	Xtreme 065 6313-2RS/CSB
70	110	20	39.7	31	3600	Xtreme 070 6014-2RS/CSB
70	125	24	63.7	45	3400	Xtreme 070 6214-2RS/CSB
70	150	35	111	68	3000	Xtreme 070 6314-2RS/CSB
75	115	20	41.6	33.5	3400	Xtreme 075 6015-2RS/CSB
75	130	25	68.9	49	3200	Xtreme 075 6215-2RS/CSB
75	160	37	119	76.5	2800	Xtreme 075 6315-2RS/CSB

d	D (mm)	B	C (kN)	C0 (kN)	Limit speed (rpm)	Designation
80	125	22	49	40	3200	Xtreme 080 6016-2RS/CSB
80	140	26	73	55	3000	Xtreme 080 6216-2RS/CSB
80	170	39	130	86.5	2600	Xtreme 080 6316-2RS/CSB
85	130	22	52	43	3000	Xtreme 085 6017-2RS/CSB
85	150	28	87.1	64	2800	Xtreme 085 6217-2RS/CSB
85	180	41	140	96.5	2400	Xtreme 085 6317-2RS/CSB
90	140	24	60.5	50	2800	Xtreme 090 6018-2RS/CSB
90	160	30	101	73.5	2600	Xtreme 090 6218-2RS/CSB
90	190	43	151	108	2400	Xtreme 090 6318-2RS/CSB
95	145	24	63.7	54	2800	Xtreme 095 6019-2RS/CSB
95	170	32	114	81.5	2400	Xtreme 095 6219-2RS/CSB
95	200	45	159	118	2200	Xtreme 095 6319-2RS/CSB
100	150	24	63.7	54	2600	Xtreme 100 6020-2RS/CSB
100	180	34	127	93	2400	Xtreme 100 6220-2RS/CSB
100	215	47	174	140	2000	Xtreme 100 6320-2RS/CSB
105	160	26	76.1	65.5	2400	Xtreme 105 6021-2RS/CSB
105	190	36	140	104	2200	Xtreme 105 6221-2RS/CSB
105	225	49	182	153	1800	Xtreme 105 6321-2RS/CSB
110	170	28	85.2	73.5	2400	Xtreme 110 6022-2RS/CSB
110	200	38	151	118	2000	Xtreme 110 6222-2RS/CSB
110	240	50	203	180	1800	Xtreme 110 6322-2RS/CSB
120	180	28	88.4	80	2200	Xtreme 120 6024-2RS/CSB
120	215	40	146	118	1900	Xtreme 120 6224-2RS/CSB
120	260	55	208	186	1700	Xtreme 120 6324-2RS/CSB
130	200	33	112	100	2000	Xtreme 130 6026-2RS/CSB
130	230	40	156	132	1800	Xtreme 130 6226-2RS/CSB
140	210	33	111	108	1800	Xtreme 140 6028-2RS/CSB
150	225	35	125	125	1700	Xtreme 150 6030-2RS/CSB
160	240	38	143	143	1600	Xtreme 160 6032-2RS/CSB

Data sheet CeramicSpeed Xtreme open

d	D (mm)	B	C (kN)	C0 (kN)	Limit speed (rpm)	Designation
5	16	5	1.14	0.38	70000	Xtreme 005 625/CSB
6	19	6	2.34	0.95	60000	Xtreme 006 626/CSB
7	19	6	2.34	0.95	60000	Xtreme 007 607/CSB
7	22	7	3.45	1.37	53000	Xtreme 007 627/CSB
8	22	7	3.45	1.37	53000	Xtreme 008 608/CSB
10	26	8	4.75	1.96	45000	Xtreme 010 6000/CSB
10	30	9	5.40	2.36	43000	Xtreme 010 6200/CSB
10	35	11	8.52	3.4	39000	Xtreme 010 6300/CSB
12	28	8	5.40	2.36	43000	Xtreme 012 6001/CSB
12	32	10	7.28	3.1	38000	Xtreme 012 6201/CSB
12	37	12	10.10	4.15	33000	Xtreme 012 6301/CSB
15	32	9	5.85	2.85	36000	Xtreme 015 6002/CSB
15	35	11	8.06	3.75	32000	Xtreme 015 6202/CSB
15	42	13	11.90	5.4	28000	Xtreme 015 6302/CSB
17	35	10	6.37	3.25	32000	Xtreme 017 6003/CSB
17	40	12	9.95	4.75	28000	Xtreme 017 6203/CSB
17	47	14	14.30	6.5	26000	Xtreme 017 6303/CSB
20	42	12	9.95	5	26000	Xtreme 020 6004/CSB
20	47	14	13.5	6.55	24000	Xtreme 020 6204/CSB
20	52	15	16.8	7.8	23000	Xtreme 020 6304/CSB
25	47	12	11.9	6.55	22000	Xtreme 025 6005/CSB
25	52	15	14.8	7.8	22000	Xtreme 025 6205/CSB
25	62	17	23.4	11.6	20000	Xtreme 025 6305/CSB
30	55	13	13.8	8.3	19000	Xtreme 030 6006/CSB
30	62	16	20.3	11.2	18000	Xtreme 030 6206/CSB
30	72	19	29.6	16	17000	Xtreme 030 6306/CSB
35	62	14	16.8	10.25	17000	Xtreme 035 6007/CSB
35	72	17	27.0	15.3	15000	Xtreme 035 6207/CSB
35	80	21	35.1	19	16000	Xtreme 035 6307/CSB
40	68	15	17.8	11	15000	Xtreme 040 6008/CSB
40	80	18	32.5	19	14000	Xtreme 040 6208/CSB
40	90	23	42.3	24	13000	Xtreme 040 6308/CSB
45	75	16	22.1	14.6	16000	Xtreme 045 6009/CSB
45	85	19	35.1	21.6	13000	Xtreme 045 6209/CSB
45	100	25	55.3	31.5	12000	Xtreme 045 6309/CSB
50	80	16	22.9	16	15000	Xtreme 050 6010/CSB
50	90	20	37.1	23.2	12000	Xtreme 050 6210/CSB
50	110	27	65.0	38	10000	Xtreme 050 6310/CSB
55	90	18	29.6	21.2	14000	Xtreme 055 6011/CSB
55	100	21	46.2	29	10000	Xtreme 055 6211/CSB
55	120	29	74.1	45	9000	Xtreme 055 6311/CSB
60	95	18	30.7	23.2	11000	Xtreme 060 6012/CSB
60	110	22	55.3	36	9500	Xtreme 060 6212/CSB
60	130	31	85.2	52	8500	Xtreme 060 6312/CSB
65	100	18	31.9	25	10500	Xtreme 065 6013/CSB
65	120	23	58.5	40.5	8500	Xtreme 065 6213/CSB
65	140	33	97.5	60	8000	Xtreme 065 6313/CSB
70	110	20	39.7	31	9400	Xtreme 070 6014/CSB
70	125	24	63.7	45	8500	Xtreme 070 6214/CSB
70	150	35	111	68	7500	Xtreme 070 6314/CSB
75	115	20	41.6	33.5	9000	Xtreme 075 6015/CSB
75	130	25	68.9	49	8000	Xtreme 075 6215/CSB

d	D (mm)	B	C (kN)	C0 (kN)	Limit speed (rpm)	Designation
75	160	37	119	76.5	6700	Xtreme 075 6315/CSB
80	125	22	49	40	8200	Xtreme 080 6016/CSB
80	140	26	73	55	7000	Xtreme 080 6216/CSB
80	170	39	130	86.5	6300	Xtreme 080 6316/CSB
85	130	22	52	43	6700	Xtreme 085 6017/CSB
85	150	28	87.1	64	6700	Xtreme 085 6217/CSB
85	180	41	140	96.5	6000	Xtreme 085 6317/CSB
90	140	24	60.5	50	6300	Xtreme 090 6018/CSB
90	160	30	101	73.5	6300	Xtreme 090 6218/CSB
90	190	43	151	108	5600	Xtreme 090 6318/CSB
95	145	24	63.7	54	6000	Xtreme 095 6019/CSB
95	170	32	114	81.5	6000	Xtreme 095 6219/CSB
95	200	45	159	118	5300	Xtreme 095 6319/CSB
100	150	24	63.7	54	5600	Xtreme 100 6020/CSB
100	180	34	127	93	5600	Xtreme 100 6220/CSB
100	215	47	174	140	5000	Xtreme 100 6320/CSB
105	160	26	76.1	65.5	5300	Xtreme 105 6021/CSB
105	190	36	140	104	2200	Xtreme 105 6221/CSB
105	225	49	182	153	1800	Xtreme 105 6321/CSB
110	170	28	85.2	73.5	5000	Xtreme 110 6022/CSB
110	200	38	151	118	4300	Xtreme 110 6222/CSB
110	240	50	203	180	1800	Xtreme 110 6322/CSB
120	180	28	88.4	80	4800	Xtreme 120 6024/CSB
120	215	40	146	118	4000	Xtreme 120 6224/CSB
120	260	55	208	186	1700	Xtreme 120 6324/CSB
130	200	33	112	100	4300	Xtreme 130 6026/CSB
130	230	40	156	132	1800	Xtreme 130 6226/CSB
140	210	33	111	108	4000	Xtreme 140 6028/CSB
140	300	62	252	245	3600	Xtreme 140 6328/CSB
150	225	35	125	125	1700	Xtreme 150 6030/CSB
150	320	65	280	290	3200	Xtreme 150 6330/CSB
160	240	38	143	143	1600	Xtreme 160 6032/CSB
160	340	68	300	325	2800	Xtreme 160 6332/CSB
170	360	72	327	367	2800	Xtreme 170 6334/CSB
180	380	75	354	412	2800	Xtreme 180 6336/CSB
190	400	78	370	440	2500	Xtreme 190 6338/CSB