
Full Ceramic Bearings



ceramicspeed

Full Ceramic Bearings

Bearings dedicated to extreme high temperatures with notable hardness, low friction coefficient, lightweight nature, and exceptional resistance to corrosion and chemicals.

CeramicSpeed Full Ceramic Bearings are specifically engineered for use in extremely high-temperature environments, offering outstanding hardness, a low friction coefficient, lightweight characteristics, and exceptional resistance to corrosion and chemicals.

CeramicSpeed's Full Ceramic Bearings are meticulously crafted, featuring Zirconium dioxide (ZrO₂) bearing rings. Zirconium dioxide is an exceptionally tough ceramic material with heat expansion properties closely resembling those of steel, simplifying the design of shaft- and housing fits.

Notably, the bearings are fitted with superior Silicon Nitride balls that boast the highest achievable surface finish and roundness. This combination of Zirconium rings and silicon nitride balls results in a bearing solution with a low friction coefficient, reduced mass, and remarkable resistance to water, chemicals, and other aggressive media, presenting clear advantages over traditional steel bearings.

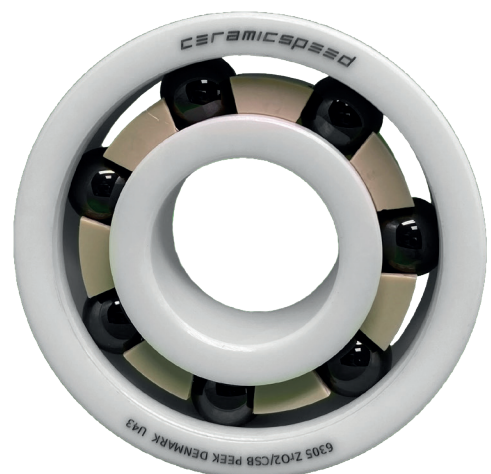
Whether applied in maritime, aerospace, or high-temperature environments, CeramicSpeed's Full Ceramic Bearings stand out as reliable, efficient, and long-lasting components. Their durability and performance make them a preferred choice for various industries, ensuring optimal functionality in demanding applications.

Advantages of CeramicSpeed Full Ceramic Bearings

- None corrosive: will survive submerged in water or other aggressive media.
- Heat resistant: Can run in temperatures beyond the possible for steel bearings.
- Low friction: Will survive running with no or very little lubrication.
- Non conductive and non magnetic: Will not influence electrical sensors or circuit.

Technical Highlights

- Inner & Outer Rings: Zirconium Oxide (ZrO₂)
- Balls: Si₃N₄ Ceramic Silicon Nitride
- Cage: PTFE (PEEK on request)
- Clearance: CN, (C3, C4 on request)
- Seals: None, (PEEK/PTFE shields on request)



Dimension (mm)			Designation	Load Rating Static C0 [kN]	Load Rating Dynamic C [kN]	Limiting Speed RPM	EURO	USD	DKK
d	D	B							
10	19	5	Xtreme 010 61800 ZrO2/CSB PTFE	0,24	0,51	32.400	34	36	255
10	22	6	Xtreme 010 61900 ZrO2/CSB PTFE	0,39	0,81	28.800	37	39	274
10	26	8	Xtreme 010 6000 ZrO2/CSB PTFE	0,74	1,43	18.000	39	45	290
10	30	9	Xtreme 010 6200 ZrO2/CSB PTFE	0,89	1,62	14.400	44	46	324
10	35	11	Xtreme 010 6300 ZrO2/CSB PTFE	1,28	2,56	13.200	75	79	555
12	21	5	Xtreme 012 61801 ZrO2/CSB PTFE	0,30	0,57	30.000	37	39	275
12	24	6	Xtreme 012 61901 ZrO2/CSB PTFE	0,45	0,87	27.000	39	41	289
12	28	8	Xtreme 012 6001 ZrO2/CSB PTFE	0,89	1,62	16.800	47	50	349
12	32	10	Xtreme 012 6201 ZrO2/CSB PTFE	1,16	2,18	13.200	58	61	430
12	37	12	Xtreme 012 6301 ZrO2/CSB PTFE	1,56	3,03	12.000	81	86	602
15	24	5	Xtreme 015 61802 ZrO2/CSB PTFE	0,39	0,60	27.000	41	43	302
15	28	7	Xtreme 015 61902 ZrO2/CSB PTFE	0,69	1,29	22.800	41	43	302
15	32	9	Xtreme 015 6002 ZrO2/CSB PTFE	1,07	1,76	14.400	50	54	375
15	35	11	Xtreme 015 6202 ZrO2/CSB PTFE	1,41	2,42	12.000	62	66	461
15	42	16	Xtreme 015 6302 ZrO2/CSB PTFE	2,03	3,57	10.200	96	102	716
17	26	5	Xtreme 017 61803 ZrO2/CSB PTFE	0,45	0,66	24.900	44	47	329
17	30	7	Xtreme 017 61903 ZrO2/CSB PTFE	0,78	1,38	20.700	43	46	322
17	35	10	Xtreme 017 6003 ZrO2/CSB PTFE	1,22	1,91	13.200	59	62	437
17	40	12	Xtreme 017 6203 ZrO2/CSB PTFE	1,78	2,99	10.200	77	81	570
17	47	14	Xtreme 017 6303 ZrO2/CSB PTFE	2,44	4,29	9.000	130	138	969
20	32	7	Xtreme 020 61804 ZrO2/CSB PTFE	0,75	1,20	20.100	49	53	368
20	37	9	Xtreme 020 61904 ZrO2/CSB PTFE	1,11	1,92	17.100	55	58	406
20	42	12	Xtreme 020 6004 ZrO2/CSB PTFE	1,88	2,99	10.800	92	98	684
20	47	14	Xtreme 020 6204 ZrO2/CSB PTFE	2,46	4,05	9.000	97	103	719
20	52	15	Xtreme 020 6304 ZrO2/CSB PTFE	2,93	5,04	8.400	154	163	1.144
25	37	7	Xtreme 025 61805 ZrO2/CSB PTFE	0,87	1,29	16.800	56	60	418
25	42	9	Xtreme 025 61905 ZrO2/CSB PTFE	1,38	2,10	14.520	60	64	445
25	47	12	Xtreme 025 6005 ZrO2/CSB PTFE	2,46	3,57	9.000	99	106	740
25	52	15	Xtreme 025 6205 ZrO2/CSB PTFE	2,93	4,44	7.800	120	127	892
25	62	17	Xtreme 025 6305 ZrO2/CSB PTFE	4,35	7,02	6.600	260	276	1.934
30	42	7	Xtreme 030 61806 ZrO2/CSB PTFE	1,02	1,35	14.700	72	77	539
30	47	9	Xtreme 030 61906 ZrO2/CSB PTFE	1,50	2,16	13.020	77	82	575
30	55	13	Xtreme 030 6006 ZrO2/CSB PTFE	3,11	4,14	7.800	123	131	917
30	62	16	Xtreme 030 6206 ZrO2/CSB PTFE	4,20	6,09	6.600	187	199	1.393
35	62	14	Xtreme 035 6007 ZrO2/CSB PTFE	3,84	5,04	6.600	164	174	1.219
35	72	17	Xtreme 035 6207 ZrO2/CSB PTFE	5,74	8,10	5.700	317	337	2.361
40	68	15	Xtreme 040 6008 ZrO2/CSB PTFE	4,13	5,34	6.000	185	197	1.378

Dimension (mm)			Designation	Load Rating Static C0 [kN]	Load Rating Dynamic C [kN]	Limiting Speed	EURO	USD	DKK
d	D	B							
40	80	18	Xtreme 040 6208 ZrO2/CSB PTFE	7,13	9,75	5.100	395	420	2.938
45	75	16	Xtreme 045 6009 ZrO2/CSB PTFE	5,48	6,63	5.400	215	228	1.599
45	85	19	Xtreme 045 6209 ZrO2/CSB PTFE	8,10	10,53	4.500	424	451	3.157