

ZrO₂ (Zirconia) Ceramic

Deep Groove Ball Bearings
Angular Contact Ball Bearings
Spherical Ball Bearings
Thrust Ball Bearings



FDA/Caustic Washdown
Medical
Bio/Pharma
Chemistry
Semiconductor
Food Process/Packaging
Aerospace/Space
Marine

ZrO₂ (Zirconia Ceramic) Ball Bearing Advantages



LM76 Zirconia (ZrO₂) roller bearings are FDA/USDA/3A Dairy and Caustic Washdown Compliant



Because ZrO₂ roller balls are 1/3 the weight of standard steel balls they can reach extreme RPM speeds



Because ZrO₂ balls are harder than steel balls they can take higher loads at a lower coefficient of friction and offer a longer life



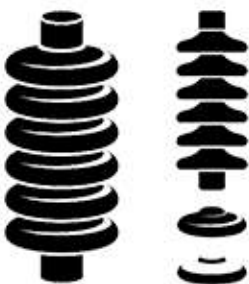
ZrO₂ ball bearings are inert to chemicals and caustics



ZrO₂ Ball Bearings can see operational temperatures over 1000F



ZrO₂ ball bearings have no magnetic signature



ZrO₂ ball bearings are electrically insulated - not conductive



All Zr O2

Deep Groove Ball Bearings

To add PTFE Protective Shields add 2PS to the part Number Ex. 6362PS

Bearing NO.	Dimension(mm)				Weight (kg)
	ID	OD	Width	r(min)	ZrO2
683	3	7	2	0.1	0.00024
693		8	3	0.15	0.0005
603		9	3	0.15	0.0007
623		10	4	0.15	0.0013
633		13	5	0.15	0.0025
684	4	9	2.5	0.1	0.0005
694		11	4	0.15	0.0013
604		12	4	0.2	0.0017
624		13	5	0.2	0.0023
634		16	5	0.3	0.004
685	5	11	3	0.15	0.0009
695		13	4	0.2	0.0019
605		14	5	0.2	0.0027
625		16	5	0.3	0.0038
635		19	6	0.3	0.0066
686	6	13	3.5	0.15	0.0015
696		15	5	0.2	0.003
606		17	6	0.3	0.0046
626		19	6	0.3	0.0063
636		22	7	0.3	0.0108
687	7	14	3.5	0.15	0.0017
697		17	5	0.3	0.004
607		19	6	0.3	0.0059
627		22	7	0.3	0.0098
637		26	9	0.3	0.0185
688	8	16	4	0.2	0.0025
698		19	6	0.3	0.0056
608		22	7	0.3	0.0093
628		24	8	0.3	0.013
638		28	9	0.3	0.022
689	9	17	4	0.2	0.0027
699		20	6	0.3	0.0065
609		24	7	0.3	0.011
629		26	8	0.3	0.015
639		30	10	0.6	0.028
6800	10	19	5	0.3	0.004
6900		22	6	0.3	0.007
6000		26	8	0.3	0.014
6200		30	9	0.6	0.025
6300		35	11	0.6	0.04
6801		21	5	0.3	0.005
6901		24	6	0.3	0.008

All ZrO2

Deep Groove Ball Bearings

16001	12	28	7	0.3	0.015
6001		28	8	0.3	0.017
6201		32	10	0.6	0.028
6301		37	12	1	0.046
6802		24	5	0.3	0.005
6902		28	7	0.3	0.012
16002		32	8	0.3	0.021
6002		32	9	0.3	0.024
6202		35	11	0.6	0.035
6302	15	42	13	1	0.064
6803		26	5	0.3	0.005
6903		30	7	0.3	0.013
16003		35	8	0.3	0.025
6003		35	10	0.3	0.032
6203		40	12	0.6	0.052
6303		47	14	1	0.087
6403	17	62	17	1.1	0.21
6804		32	7	0.3	0.013
6904		37	9	0.3	0.028
16004		42	8	0.3	0.037
6004		42	12	0.6	0.052
6204		47	14	1	0.082
6304		52	15	1.1	0.11
6404	20	72	19	1.1	0.31
6805		37	7	0.3	0.016
6905		42	9	0.3	0.032
16005		47	8	0.3	0.045
6005		47	12	0.6	0.061
6205		52	15	1	0.099
6305		62	17	1.1	0.18
6405	25	80	21	1.5	0.41
6806		42	7	0.3	0.018
6906		47	9	0.3	0.04
16006		55	9	0.3	0.067
6006		55	13	1	0.089
6206		62	16	1	0.15
6306		72	19	1.1	0.27
6406	30	90	23	1.5	0.57
6807		47	7	0.3	0.021
6907		55	10	0.6	0.058
16007		62	9	0.3	0.082
6007		62	14	1	0.12
6207	35	72	17	1.1	0.22
6307		80	21	1.5	0.36
6407		100	25	1.5	0.73
6808		52	7	0.3	0.02
6908		62	12	0.6	0.09

All Zr O2

Deep Groove Ball Bearings

16008		68	9	0.3	0.1
6008		68	15	1	0.15
6208		80	18	1.1	0.28
6308		90	23	1.5	0.49
6408	40	110	27	2	0.946
6809		58	7	0.3	0.029
6909		68	12	0.6	0.097
16009		75	10	0.6	0.13
6009		75	16	1	0.19
6209		85	19	1.1	0.32
6309		100	25	1.5	0.64
6409	45	120	29	2	1.18
6810		65	7	0.3	0.038
6910		72	12	0.6	0.1
16010		80	10	0.6	0.13
6010		80	16	1	0.2
6210		90	20	1.1	0.35
6310		110	27	2	0.82
6410	50	130	31	2.1	1.45
6811		72	9	0.3	0.06
6911		80	13	1	0.15
16011		90	11	0.6	0.2
6011		90	18	1.1	0.29
6211		100	21	1.5	0.48
6311		120	29	2	1.05
6411	55	140	33	2.1	1.76
6812		78	10	0.3	0.08
6912		85	13	1	0.15
16012		95	11	0.6	0.22
6012		95	18	1.1	0.32
6212		110	22	1.5	0.6
6312		130	31	2.1	1.32
6412	60	150	35	2.1	2.13
6813		85	10	0.6	0.1
6913		90	13	1	0.17
16013		100	11	0.6	0.23
6013		100	18	1.1	0.34
6213	65	120	23	1.5	0.77
6313		140	33	2.1	1.62
6814		90	10	0.6	0.1
6914		100	16	1	0.27
16014		110	13	0.6	0.34
6014		110	20	1.1	0.47
6214		125	24	1.5	0.84
6314	70	150	35	2.1	1.98
6815		95	10	0.6	0.11
6915		105	16	1	0.28

All Zr O2 Deep Groove Ball Bearings

16015		115	13	0.6	0.36
6015		115	20	1.1	0.5
6215	75	130	25	1.5	0.92
6816	80	100	10	0.6	0.12
6916		110	16	1	0.3
16016		125	14	0.6	0.48
6016		125	22	1.1	0.67
6216	80	140	26	2	1.09
6817	85	110	13	1	0.2
6917		120	18	1.1	0.42
16017		130	14	0.6	0.5
6017		130	22	1.1	0.71
6217	85	150	28	2	1.35
6818	90	115	13	1	0.21
6918		125	18	1.1	0.45
16018		140	16	1	0.67
6018		140	24	1.5	0.92
6819	95	120	13	1	0.23
6919		130	18	1.1	0.46
16019		145	16	1	0.7
6019		145	24	1.5	0.95
6820	100	125	13	1	0.24
6920		140	20	1.1	0.64
16020		150	16	1	0.73
6020		150	24	1.5	0.99
6821	105	130	13	1	0.25
6921		145	20	1.1	0.66
6822	110	140	16	1	0.38
6922		150	20	1.1	0.69
6824		120	150	16	1



All Zr O2 Angular Contact Ball Bearing Catalog

To add PTFE Protective Shields add 2PS to the part Number Ex. 7900 2PS

Bearing NO	Dimension (mm)					Weight
	ID	OD	Width	r(min)	rl(min)	(kg)
						ZrO2
7900	10	22	6	0.3	0.15	0.007
7000		26	8	0.3	0.15	0.014
7200		30	9	0.6	0.3	0.025
7300		35	11	0.6	0.3	0.04
7901	12	24	6	0.3	0.15	0.008
7001		28	8	0.3	0.15	0.017
7201		32	10	0.6	0.3	0.028
7301		37	12	1	0.6	0.046
7902	15	28	7	0.3	0.15	0.012
7002		32	9	0.3	0.15	0.024
7202		35	11	0.6	0.3	0.035
7302		42	13	1	0.6	0.064
7903	17	30	7	0.3	0.15	0.013
7003		35	10	0.3	0.15	0.032
7203		40	12	0.6	0.3	0.052
7303		47	14	1	0.6	0.087
7904	20	37	9	0.3	0.15	0.028
7004		42	12	0.6	0.3	0.052
7204		47	14	1	0.6	0.082
7304		52	15	1.1	0.6	0.11
7905	25	42	9	0.3	0.15	0.032
7005		47	12	0.6	0.3	0.061
7205		52	15	1	0.6	0.099
7305		62	17	1.1	0.6	0.18
7906	30	47	9	0.3	0.15	0.04
7006		55	13	1	0.6	0.089
7206		62	16	1	0.6	0.15
7306		72	19	1.1	0.6	0.27
7907	35	55	10	0.6	0.3	0.058
7007		62	14	1	0.6	0.12
7207		72	17	1.1	0.6	0.22
7307		80	21	1.5	1	0.36
7908	40	62	12	0.6	0.3	0.09
7008		68	15	1	0.6	0.15
7208		80	18	1.1	0.6	0.28
7308		90	23	1.5	1	0.49
7909	45	68	12	0.6	0.3	0.097
7009		75	16	1	0.6	0.19
7209		85	19	1.1	0.6	0.32
7309		100	25	1.5	1	0.64
7910	45	72	12	0.6	0.3	0.1
7010		80	16	1	0.6	0.2

All Zr O2 Angular Contact Ball Bearing Catalog

7210		90	20	1.1	0.6	0.35
7310	50	110	27	2	1	0.82
7911		80	13	1	0.6	0.15
7011		90	18	1.1	0.6	0.29
7211		100	21	1.5	1	0.48
7311	55	120	29	2	1	1.05
7912		85	13	1	0.6	0.15
7012		95	18	1.1	0.6	0.32
7212		110	22	1.5	1	0.6
7312	60	130	31	2.1	1.1	1.32
7913		90	13	1	0.6	0.17
7013		100	18	1.1	0.6	0.34
7213		120	23	1.5	1	0.77
7313	65	140	33	2.1	1.1	1.62
7914		100	16	1	0.6	0.27
7014		110	20	1.1	0.6	0.47
7214		125	24	1.5	1	0.84
7314	70	150	35	2.1	1.1	1.98
7915		105	16	1	0.6	0.28
7015		115	20	1.1	0.6	0.5
7215	75	130	25	1.5	1	0.92
7916		110	16	1	0.6	0.3
7016		125	22	1.1	0.6	0.67
7216	80	140	26	2	1	1.09
7017		130	22	1.1	0.6	0.71
7217	85	150	28	2	1	1.35
7918		125	18	1.1	0.6	0.45
7018	90	140	24	1.5	1	0.92
7919		130	18	1.1	0.6	0.46
7019	95	145	24	1.5	1	0.95
7920		140	20	1.1	0.6	0.64
7020	100	150	24	1.5	1	0.99
7921	105	145	20	1.1	0.6	0.66
7922	110	150	20	1.1	0.6	0.69



All Zr O2 Spherical Bearing Catalog

Bearing NO.	Dimension(mm)								Weight(kg)
	d	D	B	s	C	r/min	G	ds	ZrO2
UC201	12	47	31	12.7	17	0.6	4.5	M6 X 1	0.16
UC202	15	47	31	12.7	17	0.6	4.5	M6 X 1	0.15
UC203	17	47	31	12.7	17	0.6	4.5	M6 X 1	0.14
UC204	20	47	31	12.7	17	1	4.5	M6 X 1	0.12
UC205	25	52	34.1	14.3	17V	1	5	M6 X 1	0.17
UC206	30	62	38.1	15.9	19	1	5	M6 X 1	0.27
UC207	35	72	42.9	17.5	20	1.1	6	MS X 1	0.4
UC208	40	80	49.2	19	21	1.1	8	MS X 1	0.54
UC209	45	85	49.2	19	22	1.1	8	MS X 1	0.57
UC210	50	90	51.6	19	24	1.1	9	M10 X 1	0.64
UC211	55	100	55.6	22.2	25	1.5	9	M10 X 1	0.89
UC212	60	110	65.1	25.4	27	1.5	10	M10 X 1	1.2
UC213	65	120	65.1	25.4	27	1.5	10	M10 X 1	1.51
UC214	70	125	74.6	30.2	29	1.5	12	M12 X 1.25	1.68
UC215	75	130	77.8	33.3	30	1.5	12	M12 X 1.25	1.86
UC216	80	140	82.6	33.3	33	2	14	M12 X 1.25	2.17
UC217	85	150	85.7	34.1	36	2	14	M12 X 1.25	2.62
UC218	90	160	96	39.7	37	2	14	M12 X 1.25	3.31
UC220	100	180	108	42	41	2	14	M12 X 1.25	3.46



Zr 02 Thrust Ball Bearing Catalog

Bearing NO.	Dimension(mm)				Weight(kg)
	ID	OD	Height	r(min)	Zr02
51100	10	24	9	0.3	0.015
51200		26	11	0.6	0.022
51101	12	26	9	0.3	0.016
51201		28	11	0.6	0.024
51102	15	28	9	0.3	0.018
51202		32	12	0.6	0.033
51103	17	30	9	0.3	0.019
51203		35	12	0.6	0.038
51104	20	35	10	0.3	0.028
51204		40	14	0.6	0.059
51105	25	42	11	0.6	0.043
51205		47	15	0.6	0.085
51106	30	47	11	0.6	0.049
51206		52	16	0.6	0.11
51107	35	52	12	0.6	0.062
51207		62	18	1	0.16
51108	40	60	13	0.6	0.092
51208		68	19	1	0.21
51109	45	65	14	0.6	0.11
51209		73	20	1	0.24
51110	50	70	14	0.6	0.12
51210		78	22	1	0.29
51111	55	78	16	0.6	0.17
51211		90	25	1	0.46
51112	60	85	17	1	0.22
51212		95	26	1	0.52
51113	65	90	18	1	0.25
51213		100	27	1	0.58
51114	70	95	18	1	0.27
51214		105	27	1	0.61
51115	75	100	19	1	0.3
51215		110	27	1	0.65
51116	80	105	19	1	0.32
51216		115	28	1	0.72
51117	85	110	19	1	0.34
51217		125	31	1	0.94
51118	90	120	22	1	0.5
51218		135	35	1.1	1.3
51120	100	135	25	1	0.74
51220		150	38	1.1	1.73
51122	110	145	25	1	0.8
51124	120	155	25	1	0.86

L.M76
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Washdown Applications.**

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