

LINKAGES | Spherical Bearings

Spherical bearings are used whenever motion is needed to change the alignment of an axis.

BEARING STEEL BEARINGS

BALL

- 52100 Bearing Steel
- Heat Treated
- Hard Chrome Plated
- Precision Ground

RACE

- Chromoly Steel (COM / MCOM)
- Heat Treated
- PTFE Lined Optional (COM-T / HCOM-T) / MCOM-T

COM(-T) INCH SERIES

COM Metal to Metal	COM-T PTFE Lined	B +.0015 - .0005	D +.0000 - .0007	T ± .005	W ± .005	O Flat Dia. Ref.	M Cham. Ref.	Ball Dia. Ref.	Misalign. Angle a°	Ult. Radial Static Load (Lbs.)	Approx. Brg. Wgt. (Lbs.)
COM2	-	0.1650	0.4687	0.187	0.250	0.235	0.020	0.343	9.0	3,200	0.01
COM3	COM3T	0.1900	0.5625	0.218	0.281	0.293	0.015	0.406	11.0	4,875	0.01
COM4	COM4T	0.2500	0.6562	0.250	0.343	0.364	0.022	0.500	13.5	7,425	0.02
COM5	COM5T	0.3125	0.7500	0.281	0.375	0.419	0.032	0.562	12.0	9,713	0.03
COM6	COM6T	0.3750	0.8125	0.312	0.406	0.516	0.032	0.656	10.0	12,600	0.04
COM7	COM7T	0.4375	0.9062	0.343	0.437	0.530	0.032	0.687	8.0	14,180	0.05
COM8	COM8T	0.5000	1.0000	0.390	0.500	0.640	0.032	0.781	9.5	19,875	0.07
COM9	COM9T	0.5625	1.0937	0.437	0.562	0.710	0.032	0.875	9.5	24,945	0.09
COM10	COM10T	0.6250	1.1875	0.500	0.625	0.780	0.032	0.968	8.5	31,920	0.11
COM12	COM12T	0.7500	1.4375	0.593	0.750	0.920	0.044	1.187	9.0	47,880	0.20
COM12-757	-	0.7570	1.4375	0.593	0.750	0.920	0.044	1.187	9.0	47,880	0.20
COM14	COM14T	0.8750	1.5625	0.703	0.875	0.980	0.044	1.312	9.5	62,940	0.26
COM16	COM16T	1.0000	1.7500	0.797	1.000	1.118	0.044	1.500	10.0	82,800	0.39
HCOM16	HCOM16T	1.0000	2.0000	0.781	1.000	1.360	0.032	1.687	9.0	106,230	0.55
HCOM19	HCOM19T	1.1875	2.3750	0.937	1.187	1.610	0.032	2.000	8.5	151,095	0.90
HCOM20	HCOM20T	1.2500	2.3750	0.937	1.187	1.610	0.032	2.000	8.5	151,095	0.90
HCOM24	HCOM24T	1.5000	2.7500	1.094	1.375	1.860	0.032	2.312	8.5	203,925	1.36
HCOM28	HCOM28T	1.7500	3.1250	1.250	1.562	2.110	0.044	2.625	8.0	264,555	1.95
HCOM32	HCOM32T	2.0000	3.5000	1.375	1.750	2.360	0.044	2.937	8.5	325,590	2.66

MCOM(-T) METRIC SERIES

MCOM Metal to Metal	MCOM-T PTFE Lined	B +.065 - .013	D +.000 - .018	T ± .13	W ± .13	O Flat Dia. Ref.	M Cham. Ref.	Ball Dia. Ref.	Misalign. Angle a°	Ult. Radial Static Load (Newtons)	Approx. Brg. Wgt. (Grams)
MCOM5	MCOM5T	5	16	6.00	8	7.68	0.5	11.10	12.5	27,555	9
MCOM6	MCOM6T	6	18	6.75	9	8.93	0.5	12.70	12.5	35,459	13
MCOM8	MCOM8T	8	22	9.00	12	10.35	0.8	15.88	14.0	59,121	24
MCOM10	MCOM10T	10	26	10.50	14	12.88	0.8	19.05	13.5	82,744	40
MCOM12	MCOM12T	12	30	12.00	16	15.39	0.8	22.23	13.0	112,829	80
MCOM14	MCOM14T	14	34	13.50	19	16.86	1.0	25.40	16.0	141,845	110
MCOM16	MCOM16T	16	38	15.00	21	19.34	1.0	28.58	15.0	177,343	130
MCOM18	MCOM18T	18	42	16.50	23	21.89	1.0	31.75	15.0	216,714	170
MCOM20	MCOM20T	20	46	18.00	25	24.35	1.0	34.93	14.5	260,086	230
MCOM22	MCOM22T	22	50	20.00	28	25.84	1.5	38.10	15.0	315,216	280
MCOM25	MCOM25T	25	56	22.00	31	29.60	1.5	42.86	15.0	390,056	390
MCOM30	MCOM30T	30	66	25.00	37	34.81	1.5	50.80	17.0	525,360	610

SLB SERIES

BALL

- 52100 Bearing Steel
- Heat Treated
- Hard Chrome Plated
- Precision Ground

LINER

- High Strength Carbon Fiber Reinforced PTFE/Nylon Compound

RACE

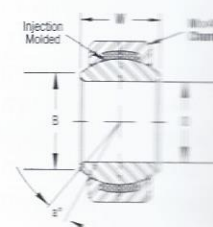
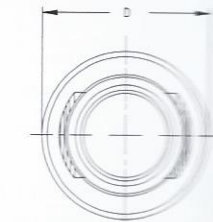
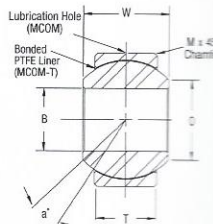
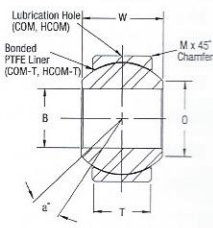
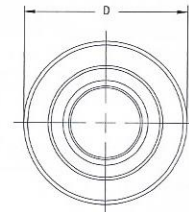
- Stainless Steel
- Heat Treated



Part Number	B +.0015 - .0005	D +.0000 - .0007	T ± .005	W ± .005	O Flat Dia. Ref.	M Cham. Ref.	Ball Dia. Ref.	Misalign. Angle a°	Ult. Radial Static Load Lbs.	Ult. Axial Push-Out Load (Lbs.)	Approx. Brg. Wgt. (Lbs.)
SLB10	.6250	1.1875	0.500	0.625	0.780	0.032	0.968	8.5	7,572	5,040	0.10



ALSO AVAILABLE IN STAINLESS STEEL



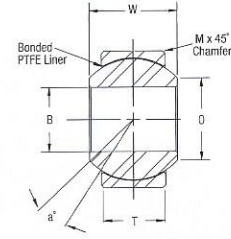
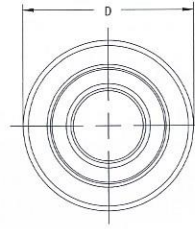
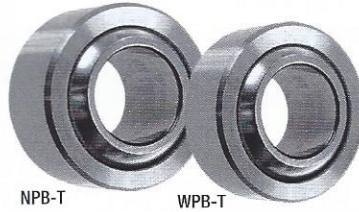
STAINLESS STEEL BEARINGS

BALL

- 440C Stainless Steel
- Heat Treated
- Hard Chrome Plated
- Precision Ground

RACE

- Stainless Steel
- Heat Treated
- PTFE Lined



NPB-T SERIES / WPB-T SERIES

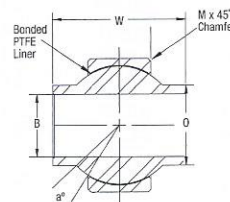
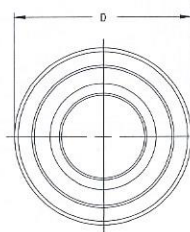
DIMENSIONS IN INCHES

Part Number	B + .0000 - .0005	D + .0000 - .0005	T ± .005	W + .000 - .002	O Flat Dia. Ref.	M Cham. Ref.	Ball Dia. Ref.	Misalign. Angle a°	Ult. Radial Static Load (Lbs.)	Ult. Axial Static Load (Lbs.)	Approx. Brg. Wgt. (Lbs.)	No Load Breakaway Torque (In.*Lbs.)
NARROW BALL												
NPB3T	0.1900	0.5625	0.218	0.281	0.293	0.015	0.406	10	3,975	150	0.02	0.25-5
NPB4T	0.2500	0.6562	0.250	0.343	0.364	0.022	0.500	10	6,040	430	0.02	0.25-5
NPB5T	0.3125	0.7500	0.281	0.375	0.419	0.032	0.562	10	8,750	700	0.03	1-8
NPB6T	0.3750	0.8125	0.312	0.406	0.475	0.032	0.656	9	10,540	1,100	0.04	1-8
NPB7T	0.4375	0.9062	0.343	0.437	0.530	0.032	0.687	8	13,200	1,400	0.05	3-12
NPB8T	0.5000	1.0000	0.390	0.500	0.600	0.032	0.781	8	17,900	2,100	0.07	3-12
NPB9T	0.5625	1.0937	0.437	0.562	0.670	0.032	0.875	8	23,200	3,680	0.09	3-12
NPB10T	0.6250	1.1875	0.500	0.625	0.739	0.032	0.968	8	30,500	4,720	0.12	3-12
NPB12T	0.7500	1.4375	0.593	0.750	0.920	0.044	1.187	8	46,400	6,750	0.21	3-12
NPB14T	0.8750	1.5625	0.703	0.875	0.980	0.044	1.312	8	62,200	9,350	0.27	3-12
NPB16T	1.0000	1.7500	0.797	1.000	1.118	0.044	1.500	9	82,200	12,160	0.39	3-12
WIDE BALL												
WPB4T	0.2500	0.6250	0.327	0.437	0.300	0.022	0.531	15	5,500	1,770	0.03	0.25-5
WPB5T	0.3125	0.6875	0.317	0.437	0.360	0.032	0.593	14	9,400	1,640	0.04	1-8
WPB6T	0.3750	0.8125	0.406	0.500	0.466	0.032	0.687	8	13,700	2,630	0.06	1-8
WPB7T	0.4375	0.9375	0.442	0.562	0.537	0.032	0.781	10	20,700	3,650	0.08	3-12
WPB8T	0.5000	1.0000	0.505	0.625	0.607	0.032	0.875	9	21,400	4,970	0.10	3-12
WPB9T	0.5625	1.1250	0.536	0.687	0.721	0.032	1.000	10	26,600	5,370	0.14	3-12
WPB10T	0.6250	1.1875	0.567	0.750	0.752	0.032	1.062	12	29,000	6,130	0.16	3-12
WPB12T	0.7500	1.3750	0.630	0.875	0.845	0.044	1.250	13	37,000	7,730	0.24	3-12
WPB14T	0.8750	1.6250	0.755	0.875	0.995	0.044	1.375	6	65,200	10,800	0.35	3-12
WPB16T	1.0000	2.1250	1.005	1.375	1.269	0.044	1.875	12	104,000	19,300	0.97	3-12

YPB-T (HIGH MISALIGNMENT) SERIES

DIMENSIONS IN INCHES

Part Number	B + .0000 - .0005	D + .0000 - .0007	T ± .005	W + .000 - .005	O Flat Dia. Ref.	M Cham. Ref.	Ball Dia. Ref.	Misalign. Angle a°	Ult. Radial Static Load (Lbs.)	Approx. Brg. Wgt. (Lbs.)
YPB4T	0.2500	0.7400	0.255	0.593	0.390	0.020	0.593	24	7,560	0.04
YPB5T	0.3125	0.9060	0.345	0.813	0.512	0.030	0.781	23	16,975	0.07
YPB6T	0.3750	0.9060	0.345	0.813	0.512	0.030	0.781	23	16,975	0.07
YPB7T	0.4375	1.0000	0.345	0.875	0.618	0.030	0.875	22	19,018	0.10
YPB8T	0.5000	1.1250	0.401	0.937	0.730	0.030	1.000	20	25,263	0.16
YPB10T	0.6250	1.3750	0.567	1.200	0.856	0.030	1.250	20	44,651	0.25
YPB12T	0.7500	1.5625	0.620	1.280	0.970	0.035	1.325	18	53,507	0.32



Linkages