

# METRIC SERIES BALL BEARINGS

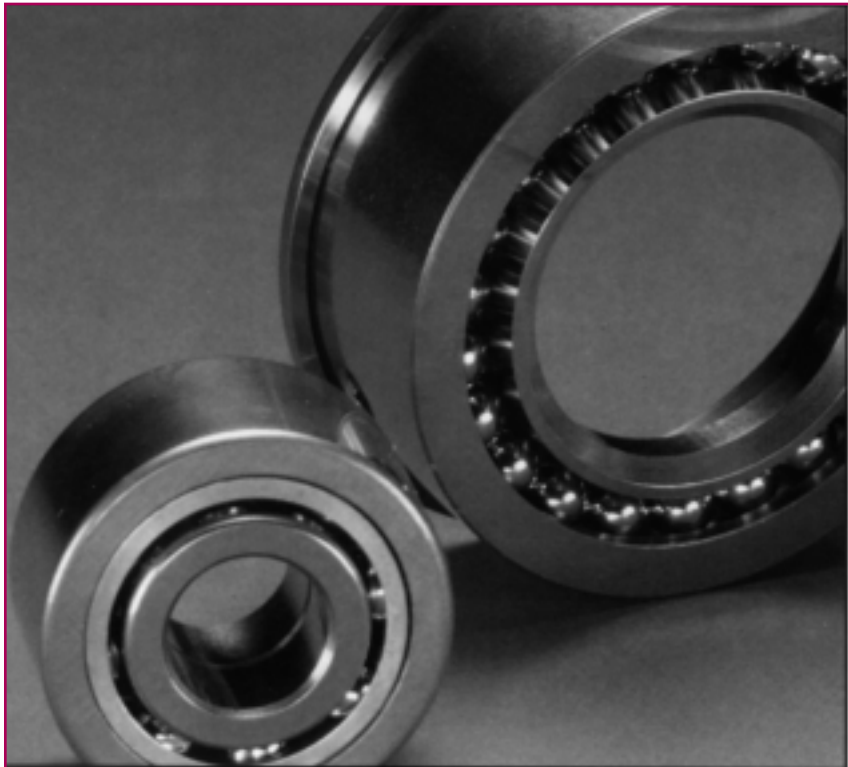
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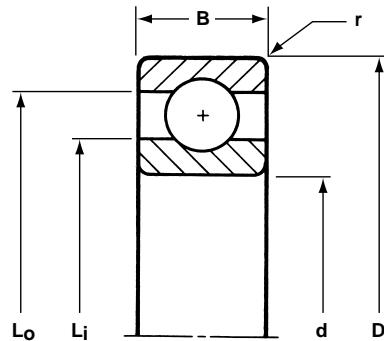
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# Radial Bearings



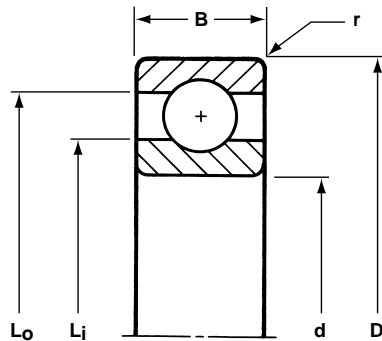
## Notes:

1. Metric series radial ball bearings are typically manufactured from 52100, to ABEC 3, 5, or 7 tolerances.
2. Fillet Radius (r)=maximum shaft or housing fillet radius that bearing corners will clear.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	Li	L0		NO.	SIZE	DYN. C	STATIC C0
							INCH	INCH	INCH				
R-1900	10	.3937	22	.8661	6	.2362	.570	.734	.012	9	1/8	580	280
R-100	10	.3937	26	1.0236	8	.3150	.583	.837	.012	7	3/16	1000	440
R-200	10	.3937	30	1.1811	9	.3543	.656	.919	.024	7	7/32	1300	580
R-300	10	.3937	35	1.3780	11	.4331	.717	1.055	.024	6	9/32	1800	770
R-1901	12	.4724	24	.9449	6	.2362	.629	.800	.012	9	9/64	730	350
R-101	12	.4724	28	1.1024	8	.3150	.670	.900	.012	7	3/16	1000	460
R-201	12	.4724	32	1.2598	10	.3937	.725	1.007	.024	7	15/64	1500	670
R-301	12	.4724	37	1.4567	12	.4724	.777	1.153	.039	6	5/16	2150	930
R-1902	15	.5906	28	1.1024	7	.2756	.735	.972	.012	10	5/32	940	490
R-102	15	.5906	32	1.2598	9	.3543	.803	1.048	.012	9	3/16	1250	630
R-202	15	.5906	35	1.3780	11	.4331	.815	1.153	.024	7	1/4	1700	790
R-302	15	.5906	42	1.6535	13	.5118	.934	1.310	.039	7	5/16	2500	1200
R-1903	17	.6693	30	1.1811	7	.2756	.832	1.015	.012	11	5/32	1000	550
R-103	17	.6693	35	1.3780	10	.3937	.910	1.140	.012	10	3/16	1300	710
R-203	17	.6693	40	1.5748	12	.4724	.952	1.292	.024	8	17/64	2100	1050
R-303	17	.6693	47	1.8504	14	.5512	1.017	1.495	.039	7	11/32	3000	1450
R-1804	20	.7874	32	1.2598	7	.2756	.948	1.098	.012	14	1/8	750	480
R-1904	20	.7874	37	1.4567	9	.3543	.995	1.262	.012	9	7/32	1600	860
R-104	20	.7874	42	1.6535	12	.4724	1.075	1.375	.024	8	1/4	1900	990
R-204	20	.7874	47	1.8504	14	.5512	1.131	1.507	.039	8	5/16	2850	1450
R-304	20	.7874	52	2.0472	15	.5906	1.192	1.643	.039	7	3/8	3550	1750
R-1805	25	.9843	37	1.4567	7	.2756	1.145	1.295	.012	17	1/8	820	600
R-1905	25	.9843	42	1.6535	9	.3543	1.195	1.460	.012	11	7/32	1850	1100
R-105	25	.9843	47	1.8504	12	.4724	1.267	1.567	.024	10	1/4	2200	1300
R-205	25	.9843	52	2.0472	15	.5906	1.328	1.703	.039	9	5/16	3100	1750
R-305	25	.9843	62	2.4409	17	.6693	1.450	1.976	.039	7	7/16	4750	2450

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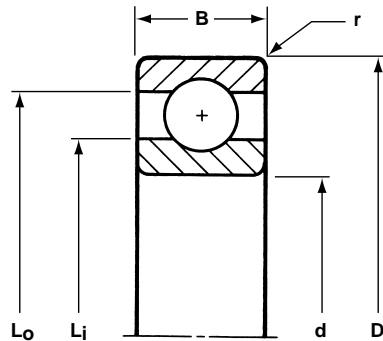
## Radial Bearings



BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	L <sub>j</sub>	L <sub>0</sub>		NO.	SIZE	DYN. C	STATIC C <sub>0</sub>
							INCH	INCH	INCH				
R-1806	30	1.1811	42	1.6535	7	.2756	1.342	1.492	.012	20	1/8	880	700
R-1906	30	1.1811	47	1.8504	9	.3543	1.384	1.649	.012	13	7/32	2050	1350
R-106	30	1.1811	55	2.1654	13	.5118	1.504	1.842	.039	11	9/32	2900	1850
R-206	30	1.1811	62	2.4409	16	.6299	1.585	2.037	.039	9	3/8	4350	2500
R-306	30	1.1811	72	2.8346	19	.7480	1.707	2.308	.043	8	1/2	6600	3700
R-1807	35	1.3780	47	1.8504	7	.2756	1.539	1.689	.012	22	1/8	910	760
R-1907	35	1.3780	55	2.1654	10	.3937	1.621	1.922	.024	13	1/4	2600	1750
R-107	35	1.3780	62	2.4409	14	.5512	1.721	2.097	.039	11	5/16	3550	2300
R-207	35	1.3780	72	2.8346	17	.6693	1.824	2.388	.043	8	15/32	5950	3400
R-307	35	1.3780	80	3.1496	21	.8268	1.925	2.602	.059	8	9/16	8200	4700
R-1808	40	1.5748	52	2.0472	7	.2756	1.735	1.886	.012	25	1/8	970	860
R-1908	40	1.5748	62	2.4409	12	.4724	1.857	2.158	.024	14	1/4	2550	1800
R-108	40	1.5748	68	2.6772	15	.5906	1.900	2.351	.039	10	3/8	4650	2950
R-208	40	1.5748	80	3.1496	18	.7087	2.061	2.663	.043	9	1/2	7250	4450
R-308	40	1.5748	90	3.5433	23	.9055	2.183	2.935	.059	8	5/8	9900	5850
R-1809	45	1.7717	58	2.2835	7	.2756	1.877	2.178	.012	28	1/8	1000	950
R-1909	45	1.7717	68	2.6772	12	.4724	2.055	2.393	.024	15	9/32	3450	2650
R-109	45	1.7717	75	2.9528	16	.6299	2.136	2.587	.039	12	3/8	5200	3600
R-209	45	1.7717	85	3.3465	19	.7480	2.277	2.841	.043	10	15/32	6950	4550
R-309	45	1.7717	100	3.9370	25	.9843	2.440	3.268	.059	8	11/16	11800	7100
R-1810	50	1.9685	65	2.5591	7	.2756	2.169	2.357	.012	25	5/32	1550	1350
R-1910	50	1.9685	72	2.8346	12	.4724	2.232	2.570	.024	16	9/32	3600	2850
R-110	50	1.9685	80	3.1496	16	.6299	2.333	2.784	.039	13	3/8	5450	4000
R-210	50	1.9685	90	3.5433	20	.7874	2.455	3.056	.043	10	1/2	7800	5200
R-310	50	1.9685	110	4.3307	27	1.0630	2.698	3.600	.079	8	3/4	13800	8500
R-1811	55	2.1654	72	2.8346	9	.3543	2.387	2.612	.012	23	3/16	1950	1850
R-1911	55	2.1654	80	3.1496	13	.5118	2.469	2.845	.039	16	5/16	4350	3550
R-111	55	2.1654	90	3.5433	18	.7087	2.591	3.117	.043	12	7/16	6900	4950
R-211	55	2.1654	100	3.9370	21	.8268	2.712	3.389	.059	10	9/16	9650	6550
R-311	55	2.1654	120	4.7244	29	1.1417	2.956	3.933	.079	8	13/16	16000	10000



# Radial Bearings



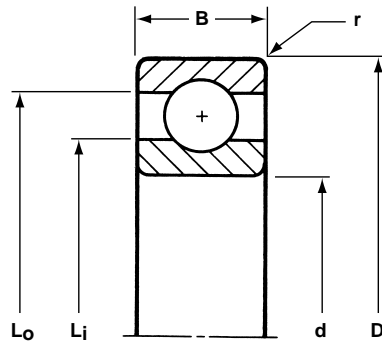
## Notes:

1. Metric series radial ball bearings are typically manufactured from 52100, to ABEC 3, 5, or 7 tolerances.
2. Fillet Radius (r)=maximum shaft or housing fillet radius that bearing corners will clear.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	Li	Lo		NO.	SIZE	DYN. C	STATIC Co
							INCH	INCH	INCH				
R-1812	60	2.3622	78	3.0709	10	.3937	2.584	2.848	.012	22	7/32	2600	2400
R-1912	60	2.3622	85	3.3465	13	.5118	2.666	3.042	.039	17	5/16	4500	3800
R-112	60	2.3622	95	3.7402	18	.7087	2.788	3.314	.043	12	7/16	6800	5050
R-212	60	2.3622	110	4.3307	22	.8661	2.970	3.722	.059	10	5/8	11700	8050
R-312	60	2.3622	130	5.1181	31	1.2205	3.213	4.266	.083	8	7/8	18300	11100
R-1813	65	2.5591	85	3.3465	10	.3937	2.821	3.084	.024	23	7/32	2600	2500
R-1913	65	2.5591	90	3.5433	13	.5118	2.863	3.239	.039	18	5/16	4600	4100
R-113	65	2.5591	100	3.9370	18	.7087	2.985	3.511	.043	13	7/16	7100	5550
R-213	65	2.5591	120	4.7244	23	.9055	3.228	4.055	.059	10	11/16	13900	9700
R-313	65	2.5591	140	5.5118	33	1.2992	3.471	4.599	.083	8	15/16	20700	13500
R-1814	70	2.7559	90	3.5433	10	.3937	3.018	3.281	.024	25	7/32	2700	2700
R-1914	70	2.7559	100	3.9370	16	.6299	3.139	3.553	.039	17	11/32	5250	4650
R-114	70	2.7559	110	4.3307	20	.7874	3.242	3.844	.043	13	1/2	9150	7200
R-214	70	2.7559	125	4.9213	24	.9449	3.424	4.252	.059	10	11/16	13900	9850
R-314	70	2.7559	150	5.9055	35	1.3780	3.729	4.932	.083	8	1	23300	15400
R-1815	75	2.9528	95	3.7402	10	.3937	3.214	3.478	.024	26	7/32	2750	2800
R-1915	75	2.9528	105	4.1339	16	.6299	3.317	3.768	.039	17	3/8	5550	6200
R-115	75	2.9528	115	4.5276	20	.7874	3.440	4.041	.043	14	1/2	7800	9500
R-215	75	2.9528	130	5.1181	25	.9843	3.621	4.449	.059	10	11/16	10000	13900
R-315	75	2.9528	160	6.2992	37	1.4567	3.986	5.265	.083	8	1-1/16	17400	26000
R-1816	80	3.1496	100	3.9370	10	.3937	3.411	3.674	.024	28	7/32	2850	3000
R-1916	80	3.1496	110	4.3307	16	.6299	3.514	3.965	.039	17	3/8	5600	6100
R-116	80	3.1496	125	4.9213	22	.8661	3.697	4.373	.043	13	9/16	9100	11300
R-216	80	3.1496	140	5.5118	26	1.0236	3.879	4.782	.079	10	3/4	11900	16200
R-316	80	3.1496	170	6.6929	39	1.5354	4.244	5.598	.083	8	1-1/8	19500	28800
R-1817	85	3.3465	110	4.3307	13	.5118	3.669	4.007	.039	24	9/32	4200	4300
R-1917	85	3.3465	120	4.7244	18	.7087	3.772	4.298	.043	16	7/16	7800	6950
R-117	85	3.3465	130	5.1181	22	.8661	3.893	4.570	.043	13	9/16	11000	9050
R-217	85	3.3465	150	5.9055	28	1.1024	4.137	5.114	.079	10	13/16	18400	13600
R-317	85	3.3465	180	7.0866	41	1.6142	4.539	5.893	.118	8	1-1/8	28500	19600

# METRIC SERIES BALL BEARINGS

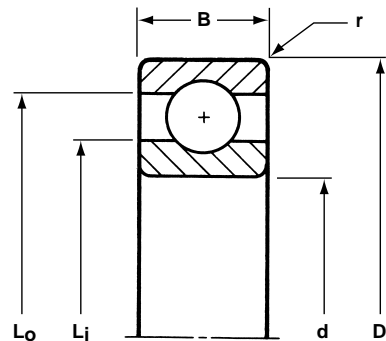
## Radial Bearings



BASIC P/N	BORE $d$		O.D. $D$		WIDTH $B$		LAND DIAMETER (REFERENCE)		FILLET RADIUS $r$	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	$L_j$	$L_0$		NO.	SIZE INCH	DYN. C	STATIC $C_0$
							INCH	INCH					
R-1818	90	3.5433	115	4.5276	13	.5118	3.866	4.204	.039	25	9/32	4250	4450
R-1918	90	3.5433	125	4.9213	18	.7087	3.969	4.495	.043	17	7/16	8000	7450
R-118	90	3.5433	140	5.5118	24	.9449	4.151	4.903	.059	13	5/8	13300	11100
R-218	90	3.5433	160	6.2992	30	1.1811	4.394	5.447	.079	10	7/8	21000	15700
R-318	90	3.5433	190	7.4803	43	1.6929	4.797	6.226	.118	8	1-3/16	31400	21800
R-1819	95	3.7402	120	4.7244	13	.5118	4.063	4.401	.039	26	9/32	4350	4650
R-1919	95	3.7402	130	5.1181	18	.7087	4.165	4.692	.043	18	7/16	8400	8100
R-119	95	3.7402	145	5.7087	24	.9449	4.348	5.100	.059	13	5/8	13500	11400
R-219	95	3.7402	170	6.6929	32	1.2598	4.652	5.780	.083	10	15/16	24300	18400
R-319	95	3.7402	200	7.8740	45	1.7717	5.055	6.559	.118	8	1-1/4	35100	24700
R-1820	100	3.9370	125	4.9213	13	.5118	4.259	4.598	.039	27	9/32	4450	4850
R-1920	100	3.9370	140	5.5118	20	.7874	4.423	5.025	.043	17	1/2	10500	9900
R-120	100	3.9370	150	5.9055	24	.9449	4.545	5.297	.059	14	5/8	14100	12400
R-220	100	3.9370	180	7.0866	34	1.3386	4.910	6.113	.083	10	1	27300	20900
R-1821	105	4.1339	130	5.1181	13	.5118	4.456	4.795	.039	28	9/32	4500	5000
R-1921	105	4.1339	145	5.7087	20	.7874	4.620	5.222	.043	17	1/2	10400	9950
R-121	105	4.1339	160	6.2992	26	1.0236	4.802	5.630	.079	13	11/16	16100	13800
R-221	105	4.1339	190	7.4803	36	1.4173	5.167	6.446	.083	10	1-1/16	30500	23500
R-1822	110	4.3307	140	5.5118	16	.6299	4.714	5.128	.039	25	11/32	6200	6800
R-1922	110	4.3307	150	5.9055	20	.7874	4.817	5.418	.043	18	1/2	10700	10600
R-122	110	4.3307	170	6.6929	28	1.1024	5.060	5.963	.079	13	3/4	18900	16300
R-222	110	4.3307	200	7.8740	38	1.4961	5.425	6.779	.079	10	1-1/8	33900	26300
R-1824	120	4.7244	150	5.9055	16	.6299	5.108	5.521	.039	27	11/32	6450	7300
R-1924	120	4.7244	165	6.4961	22	.8661	5.273	5.947	.043	17	9/16	12800	12700
R-124	120	4.7244	180	7.0866	28	1.1024	5.454	6.356	.079	14	3/4	19700	17900
R-224	120	4.7244	215	8.4646	40	1.5748	5.917	7.271	.079	10	1-1/8	33700	26900
R-1826	130	5.1181	165	6.4961	18	.7087	5.563	6.052	.043	25	13/32	8400	9500
R-1926	130	5.1181	180	7.0866	24	.9449	5.726	6.478	.059	17	5/8	15600	15600
R-126	130	5.1181	200	7.8740	33	1.2992	5.971	7.023	.079	13	7/8	25000	22300
R-226	130	5.1181	230	9.0551	40	1.5748	6.372	7.801	.098	10	1-3/16	37200	30100



# Radial Bearings



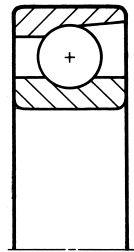
## Notes:

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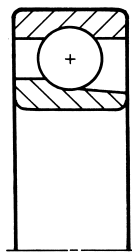
BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	L <sub>j</sub>	L <sub>o</sub>		NO.	SIZE	DYN. C	STATIC C <sub>0</sub>
							INCH	INCH	INCH				
R-1828	140	5.5118	175	6.8898	18	.7087	5.956	6.445	.043	26	13/32	8500	9800
R-1928	140	5.5118	190	7.4803	24	.9449	5.923	6.675	.059	18	5/8	16000	16500
R-128	140	5.5118	210	8.2677	33	1.2992	6.363	7.416	.079	14	7/8	26000	24300
R-228	140	5.5118	250	9.8425	42	1.6535	6.887	8.467	.098	10	1-5/16	44600	36600
R-1830	150	5.9055	190	7.4803	20	.7874	6.430	6.956	.043	26	7/16	9700	11400
R-1930	150	5.9055	210	8.2677	28	1.1024	6.635	7.538	.079	16	3/4	20900	21000
R-130	150	5.9055	225	8.8583	35	1.3780	6.855	7.908	.083	15	7/8	26900	36400
R-1832	160	6.2992	200	7.8740	20	.7874	6.823	7.350	.043	28	7/16	10000	12200
R-1932	160	6.2992	220	8.6614	28	1.1024	7.029	7.932	.079	17	3/4	21500	22500
R-132	160	6.2992	240	9.4488	38	1.4961	7.272	8.476	.083	14	1	33100	31800
R-1834	170	6.6929	215	8.4646	22	.8661	7.278	7.880	.043	26	1/2	12400	14900
R-1934	170	6.6929	230	9.0551	28	1.1024	7.423	8.325	.079	18	3/4	22000	24000
R-134	170	6.6929	260	10.2360	42	1.6535	7.788	9.141	.083	13	1-1/8	39200	37000
R-1836	180	7.0866	225	8.8583	22	.8661	7.672	8.273	.043	28	1/2	12800	16000
R-1936	180	7.0866	250	9.8425	33	1.2992	7.938	8.991	.079	17	7/8	28700	30500
R-136	180	7.0866	280	11.0240	46	1.8110	8.378	9.732	.083	14	1-1/8	40800	40400
R-1838	190	7.4803	240	9.4488	24	.9449	8.126	8.803	.059	26	9/16	15400	18900
R-1938	190	7.4803	260	10.2360	33	1.2992	8.332	9.385	.079	17	7/8	28300	30700
R-138	190	7.4803	290	11.4173	46	1.8110	8.734	10.163	.083	14	1-3/16	45500	44400
R-1840	200	7.8740	250	9.8425	24	.9449	8.520	9.197	.059	27	9/16	15600	19500
R-1940	200	7.8740	280	11.0240	38	1.4961	8.847	10.050	.083	16	1	35200	37400

# METRIC SERIES BALL BEARINGS

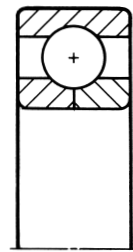
## Angular Contact Bearings



MER



MDR

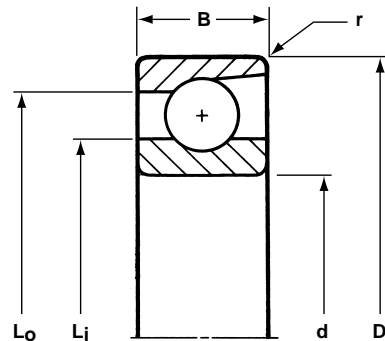


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BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	L <sub>i</sub>	L <sub>o</sub>		NO.	SIZE	DYN. C	STATIC C <sub>0</sub>
							INCH	INCH	INCH				
MER-1900	10	.3937	22	.8661	6	.2362	.570	.734	.012	11	1/8	670	340
MER-100	10	.3937	26	1.0236	8	.3150	.583	.837	.012	9	3/16	1200	560
MER-200	10	.3937	30	1.1811	9	.3543	.656	.919	.024	9	7/32	1550	750
MER-300	10	.3937	35	1.3780	11	.4331	.717	1.055	.024	8	9/32	2200	1000
MER-1901	12	.4724	24	.9449	6	.2362	.629	.800	.012	11	9/64	830	430
MER-101	12	.4724	28	1.1024	8	.3150	.670	.924	.012	10	3/16	1300	650
MER-201	12	.4724	32	1.2598	10	.3937	.725	1.007	.024	9	15/64	1800	870
MER-301	12	.4724	37	1.4567	12	.4724	.777	1.153	.039	7	5/16	2400	1100
MER-1902	15	.5906	28	1.1024	7	.2756	.735	.972	.012	12	5/32	1050	590
MER-102	15	.5906	32	1.2598	9	.3543	.816	1.042	.012	11	3/16	1400	760
MER-202	15	.5906	35	1.3780	11	.4331	.815	1.153	.024	10	1/4	2200	1150
MER-302	15	.5906	42	1.6535	13	.5118	.934	1.310	.039	9	5/16	3000	1550
MER-1903	17	.6693	30	1.1811	7	.2756	.832	1.015	.012	13	5/32	1100	660
MER-103	17	.6693	35	1.3780	10	.3937	.895	1.153	.012	13	3/16	1550	930
MER-203	17	.6693	40	1.5748	12	.4724	.952	1.292	.024	10	17/64	2450	1350
MER-303	17	.6693	47	1.8504	14	.5512	1.034	1.485	.039	8	3/8	3750	1900
MER-1804	20	.7874	32	1.2598	7	.2756	.948	1.098	.012	17	1/8	850	580
MER-1904	20	.7874	37	1.4567	9	.3543	1.002	1.267	.012	11	7/32	1850	1050
MER-104	20	.7874	42	1.6535	12	.4724	1.075	1.395	.024	11	1/4	2400	1350
MER-204	20	.7874	47	1.8504	14	.5512	1.131	1.506	.039	10	5/16	3300	1850
MER-304	20	.7874	52	2.0472	15	.5906	1.192	1.643	.039	9	3/8	4200	2250
MER-1805	25	.9843	37	1.4567	7	.2756	1.145	1.295	.012	20	1/8	920	700
MER-1905	25	.9843	42	1.6535	9	.3543	1.195	1.460	.012	14	7/32	2200	1400
MER-105	25	.9843	47	1.8504	12	.4724	1.267	1.567	.024	13	1/4	2650	1700
MER-205	25	.9843	52	2.0472	15	.5906	1.328	1.703	.039	11	5/16	3550	2150
MER-305	25	.9843	62	2.4409	17	.6693	1.450	1.976	.039	10	7/16	6000	3500



# Angular Contact Bearings



## Notes:

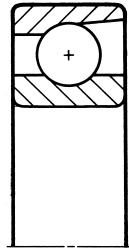
1. Metric Series Angular Contact ball bearings are typically manufactured from 52100, to ABEC 3, 5, & 7 tolerances.
2. Standard contact angles are 15° and 25°. Other options are available.
3. Part numbers listed are with outer-ring relieved configuration. Other design options are available.
4. Fillet Radius (r)=maximum shaft or housing fillet radius that bearing corners will clear.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	Lj	Lo		NO.	SIZE	DYN. C	STATIC Co
							INCH	INCH	INCH				
MER-1806	30	1.1811	42	1.6535	7	.2756	1.342	1.492	.012	23	1/8	970	810
MER-1906	30	1.1811	47	1.8504	9	.3543	1.384	1.649	.012	16	7/32	2350	1650
MER-106	30	1.1811	55	2.1654	13	.5118	1.504	1.842	.039	14	9/32	3450	2350
MER-206	30	1.1811	62	2.4409	16	.6299	1.585	2.045	.039	12	3/8	5250	3350
MER-306	30	1.1811	72	2.8346	19	.7480	1.707	2.308	.039	10	1/2	7700	4650
MER-1807	35	1.3780	47	1.8504	7	.2756	1.539	1.689	.012	26	1/8	1000	900
MER-1907	35	1.3780	55	2.1654	10	.3937	1.644	1.942	.024	18	1/4	3200	2450
MER-107	35	1.3780	62	2.4409	14	.5512	1.721	2.097	.039	15	5/16	4350	3100
MER-207	35	1.3780	72	2.8346	17	.6693	1.825	2.388	.039	10	15/32	6900	4250
MER-307	35	1.3780	80	3.1496	21	.8268	1.926	2.602	.059	10	9/16	9500	5850
MER-1808	40	1.5748	52	2.0472	7	.2756	1.735	1.886	.012	29	1/8	1050	1000
MER-1908	40	1.5748	62	2.4409	12	.4724	1.878	2.141	.024	19	1/4	3250	2700
MER-108	40	1.5748	68	2.6772	15	.5906	1.900	2.351	.039	14	3/8	5800	4100
MER-208	40	1.5748	80	3.1496	18	.7087	2.062	2.663	.039	11	1/2	8300	5450
MER-308	40	1.5748	90	3.5433	23	.9055	2.184	2.935	.059	10	5/8	11500	7300
MER-1809	45	1.7717	58	2.2835	7	.2756	1.952	2.102	.012	31	1/8	1100	1050
MER-1909	45	1.7717	68	2.6772	12	.4724	2.055	2.394	.024	19	9/32	4050	3350
MER-109	45	1.7717	75	2.9528	16	.6299	2.137	2.588	.039	15	3/8	6050	4500
MER-209	45	1.7717	85	3.3465	19	.7480	2.228	2.840	.039	13	15/32	8300	5900
MER-309	45	1.7717	100	3.9370	25	.9843	2.441	3.267	.059	11	11/16	14600	9800
MER-1810	50	1.9685	65	2.5591	7	.2756	2.169	2.357	.012	30	5/32	1650	1650
MER-1910	50	1.9685	72	2.8346	12	.4724	2.232	2.571	.024	21	9/32	4300	3750
MER-110	50	1.9685	80	3.1496	16	.6299	2.334	2.785	.039	16	3/8	6250	4900
MER-210	50	1.9685	90	3.5433	20	.7874	2.455	3.056	.039	14	1/2	9800	7250
MER-310	50	1.9685	110	4.3307	27	1.0630	2.699	3.600	.079	11	3/4	17100	11700
MER-1811	55	2.1654	72	2.8346	9	.3543	2.387	2.612	.012	29	3/16	2300	2300
MER-1911	55	2.1654	80	3.1496	13	.5118	2.469	2.845	.039	20	5/16	5050	4450
MER-111	55	2.1654	90	3.5433	18	.7087	2.592	3.116	.039	17	7/16	8700	7050
MER-211	55	2.1654	100	3.9370	21	.8268	2.713	3.389	.059	14	9/16	12100	9150
MER-311	55	2.1654	120	4.7244	29	1.1417	2.956	3.933	.079	11	13/16	19800	13800

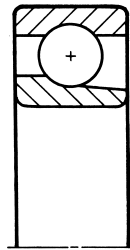


# METRIC SERIES BALL BEARINGS

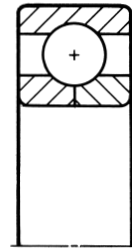
## Angular Contact Bearings



**MER**



**MDR**

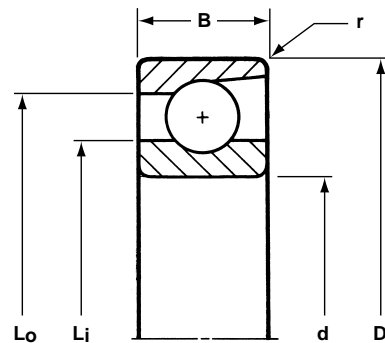


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BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	L <sub>i</sub>	L <sub>o</sub>		NO.	SIZE	DYN. C	STATIC C <sub>0</sub>
							INCH	INCH	INCH				
MER-1812	60	2.3622	78	3.0709	10	.3937	2.584	2.848	.012	28	7/32	3050	3050
MER-1912	60	2.3622	85	3.3465	13	.5118	2.666	3.042	.039	21	5/16	5150	4700
MER-112	60	2.3622	95	3.7402	18	.7087	2.788	3.314	.039	18	7/16	8950	7600
MER-212	60	2.3622	110	4.3307	22	.8661	2.971	3.722	.059	14	5/8	14700	11300
MER-312	60	2.3622	130	5.1181	31	1.2205	3.213	4.266	.079	11	7/8	22600	16100
MER-1813	65	2.5591	85	3.3465	10	.3937	2.821	3.084	.024	29	7/32	3050	3150
MER-1913	65	2.5591	90	3.5433	13	.5118	2.863	3.239	.039	23	5/16	5450	5200
MER-113	65	2.5591	100	3.9370	18	.7087	2.985	3.511	.039	19	7/16	9150	8100
MER-213	65	2.5591	120	4.7244	23	.9055	3.228	4.055	.059	14	11/16	17400	13600
MER-313	65	2.5591	140	5.5118	33	1.2992	3.471	4.599	.079	12	15/16	27200	20200
MER-1814	70	2.7559	90	3.5433	10	.3937	3.018	3.281	.024	31	7/32	3150	3350
MER-1914	70	2.7559	100	3.9370	16	.6299	3.139	3.553	.039	21	11/32	6100	5750
MER-114	70	2.7559	110	4.3307	20	.7874	3.243	3.844	.039	18	1/2	11300	9950
MER-214	70	2.7559	125	4.9213	24	.9449	3.424	4.252	.059	15	11/16	18200	14800
MER-314	70	2.7559	150	5.9055	35	1.3780	3.729	4.932	.079	12	1	30500	23000
MER-1815	75	2.9528	95	3.7402	10	.3937	3.214	3.478	.024	33	7/32	3200	3550
MER-1915	75	2.9528	105	4.1339	16	.6299	3.318	3.769	.039	26	3/8	8250	8500
MER-115	75	2.9528	115	4.5276	20	.7874	3.440	4.041	.039	20	1/2	12100	11200
MER-215	75	2.9528	130	5.1181	25	.9843	3.621	4.449	.059	16	11/16	19000	16000
MER-315	75	2.9528	160	6.2992	37	1.4567	3.986	5.265	.079	12	1-1/16	34100	26100
MER-1816	80	3.1496	100	3.9370	10	.3937	3.411	3.675	.024	35	7/32	3300	3750
MER-1916	80	3.1496	110	4.3307	16	.6299	3.515	3.966	.039	27	3/8	8350	8850
MER-116	80	3.1496	125	4.9213	22	.8661	3.809	4.261	.039	19	9/16	14500	13300
MER-216	80	3.1496	140	5.5118	26	1.0236	3.992	4.669	.079	16	3/4	22200	19000
MER-316	80	3.1496	170	6.6929	39	1.5354	4.470	5.372	.079	12	1-1/8	37800	29300
MER-1817	85	3.3465	110	4.3307	13	.5118	3.669	4.007	.039	30	9/32	4900	5450
MER-1917	85	3.3465	120	4.7244	18	.7087	3.772	4.298	.039	25	7/16	10700	11100
MER-117	85	3.3465	130	5.1181	22	.8661	3.893	4.570	.039	20	9/16	14900	14200
MER-217	85	3.3465	150	5.9055	28	1.1024	4.137	5.114	.079	15	13/16	24600	20800
MER-317	85	3.3465	180	7.0866	41	1.6142	4.539	5.893	.098	13	1-1/8	40100	32400



# Angular Contact Bearings



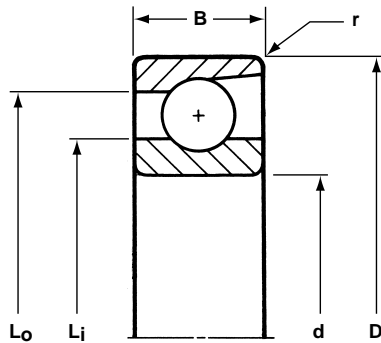
## Notes:

1. Metric Series Angular Contact ball bearings are typically manufactured from 52100, to ABEC 3, 5, & 7 tolerances.
2. Standard contact angles are 15° and 25°. Other options are available.
3. Part numbers listed are with outer-ring relieved configuration. Other designs are available.
4. Fillet Radius (r)=maximum shaft or housing fillet radius that bearing corners will clear.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	Li	Lo		NO.	SIZE	DYN. C	STATIC Co
							INCH	INCH	INCH				
MER-1818	90	3.5433	115	4.5276	13	.5118	3.904	4.166	.039	31	9/32	4950	5600
MER-1918	90	3.5433	125	4.9213	18	.7087	3.969	4.495	.039	26	7/16	10900	11600
MER-118	90	3.5433	140	5.5118	24	.9449	4.151	4.903	.059	20	5/8	18200	17400
MER-218	90	3.5433	160	6.2992	30	1.1811	4.394	5.447	.079	15	7/8	28100	24100
MER-318	90	3.5433	190	7.4803	43	1.6929	4.797	6.226	.098	13	1-3/16	44200	36200
MER-1819	95	3.7402	120	4.7244	13	.5118	4.101	4.363	.039	32	9/32	5000	5750
MER-1919	95	3.7402	130	5.1181	18	.7087	4.169	4.692	.039	28	7/16	11300	12600
MER-119	95	3.7402	145	5.7087	24	.9449	4.348	5.100	.059	21	5/8	18600	18400
MER-219	95	3.7402	170	6.6929	32	1.2598	4.652	5.780	.079	15	15/16	31900	27600
MER-319	95	3.7402	200	7.8740	45	1.7717	5.055	6.559	.098	13	1-1/4	48500	40100
MER-1820	100	3.9370	125	4.9213	13	.5118	4.259	4.598	.039	34	9/32	5150	6100
MER-1920	100	3.9370	140	5.5118	20	.7874	4.423	5.025	.039	26	1/2	13900	15100
MER-120	100	3.9370	150	5.9055	24	.9449	4.545	5.297	.059	21	5/8	18500	18600
MER-220	100	3.9370	180	7.0866	34	1.3386	4.910	6.113	.079	15	1	35800	31300
MER-1821	105	4.1339	130	5.1181	13	.5118	4.456	4.795	.039	36	9/32	5300	6400
MER-1921	105	4.1339	145	5.7087	20	.7874	4.620	5.222	.039	27	1/2	14200	15800
MER-121	105	4.1339	160	6.2992	26	1.0236	4.802	5.630	.079	21	11/16	22100	22300
MER-221	105	4.1339	190	7.4803	36	1.4173	5.167	6.446	.079	15	1-1/16	40000	35300
MER-1822	110	4.3307	140	5.5118	16	.6299	4.714	5.128	.039	32	11/32	7300	8650
MER-1922	110	4.3307	150	5.9055	20	.7874	4.817	5.418	.039	28	1/2	14300	16500
MER-122	110	4.3307	170	6.6929	28	1.1024	5.060	5.963	.079	20	3/4	25200	25100
MER-222	110	4.3307	200	7.8740	38	1.4961	5.425	6.779	.079	15	1-1/8	44300	39400
MER-1824	120	4.7244	150	5.9055	16	.6299	5.108	5.521	.039	35	11/32	7600	9400
MER-1924	120	4.7244	165	6.4961	22	.8661	5.271	5.948	.039	27	9/16	17400	20100
MER-124	120	4.7244	180	7.0866	28	1.1024	5.454	6.356	.079	22	3/4	26600	28000
MER-224	120	4.7244	215	8.4646	40	1.5748	5.917	7.271	.079	16	1-1/8	46200	43000
MER-1826	130	5.1181	165	6.4961	18	.7087	5.562	6.051	.039	32	13/32	9900	12100
MER-1926	130	5.1181	180	7.0866	24	.9449	5.726	6.478	.059	27	5/8	21200	24700
MER-126	130	5.1181	200	7.8740	33	1.2992	5.969	7.022	.079	20	7/8	33200	34300
MER-226	130	5.1181	230	9.0551	40	1.5748	6.372	7.801	.098	17	1-3/16	52900	51200

# METRIC SERIES BALL BEARINGS

## Angular Contact Bearings



### Notes:

1. Metric Series Angular Contact ball bearings are typically manufactured from 52100, to ABEC 3, 5, & 7 tolerances.
2. Standard contact angles are 15° and 25°. Other options are available.
3. Part numbers listed are with outer-ring relieved configuration. Other designs are available.
4. Fillet Radius (r)=maximum shaft or housing fillet radius that bearing corners will clear.

BASIC P/N	BORE d		O.D. D		WIDTH B		LAND DIAMETER (REFERENCE)		FILLET RADIUS r	BALL COMPLEMENT		LOAD RATINGS LBS.	
	mm	INCH	mm	INCH	mm	INCH	Li	Lo		NO.	SIZE	DYN. C	STATIC Co
							INCH	INCH	INCH		INCH		
MER-1828	140	5.5118	175	6.8898	18	.7087	5.956	6.445	.039	35	13/32	10300	13200
MER-1928	140	5.5118	190	7.4803	24	.9449	5.923	6.675	.059	29	5/8	22000	26700
MER-128	140	5.5118	210	8.2677	33	1.2992	6.363	7.416	.079	22	7/8	35100	38100
MER-228	140	5.5118	250	9.8425	42	1.6535	6.887	8.466	.098	16	1-5/16	61000	58500
MER-1830	150	5.9055	190	7.4803	20	.7874	6.429	6.956	.039	35	7/16	11800	15300
MER-1930	150	5.9055	210	8.2677	28	1.1024	6.635	7.537	.079	26	3/4	28900	34200
MER-130	150	5.9055	225	8.8583	35	1.3780	6.855	7.908	.079	23	7/8	35800	40400
MER-1832	160	6.2992	200	7.8740	20	.7874	6.823	7.349	.039	37	7/16	12100	16100
MER-1932	160	6.2992	220	8.6614	28	1.1024	7.029	7.931	.079	27	3/4	29300	35800
MER-132	160	6.2992	240	9.4488	38	1.4961	7.272	8.475	.079	22	1	44700	49900
MER-1834	170	6.6929	215	8.4646	22	.8661	7.277	7.879	.039	35	1/2	15100	20000
MER-1934	170	6.6929	230	9.0551	28	1.1024	7.422	8.325	.079	29	3/4	30300	38700
MER-134	170	6.6929	260	10.2360	42	1.6535	7.787	9.141	.079	21	1-1/8	54000	59800
MER-1836	180	7.0866	225	8.8583	22	.8661	7.671	8.273	.039	37	1/2	15500	21100
MER-1936	180	7.0866	250	9.8425	33	1.2992	7.938	8.991	.079	27	7/8	39000	48500
MER-136	180	7.0866	280	11.0240	46	1.811	8.378	9.732	.079	22	1-1/8	55100	63500
MER-1838	190	7.4803	240	9.4488	24	.9449	8.126	8.803	.059	36	9/16	19100	26200
MER-1938	190	7.4803	260	10.2360	33	1.2992	8.331	9.384	.079	28	7/8	39500	50600
MER-138	190	7.4803	290	11.4173	46	1.8110	8.734	10.163	.079	22	1-3/16	60800	70600
MER-1840	200	7.8740	250	9.8425	24	.9449	8.519	9.196	.059	37	9/16	19200	26800
MER-1940	200	7.8740	280	11.0240	38	1.4961	8.847	10.050	.079	26	1	48600	60800