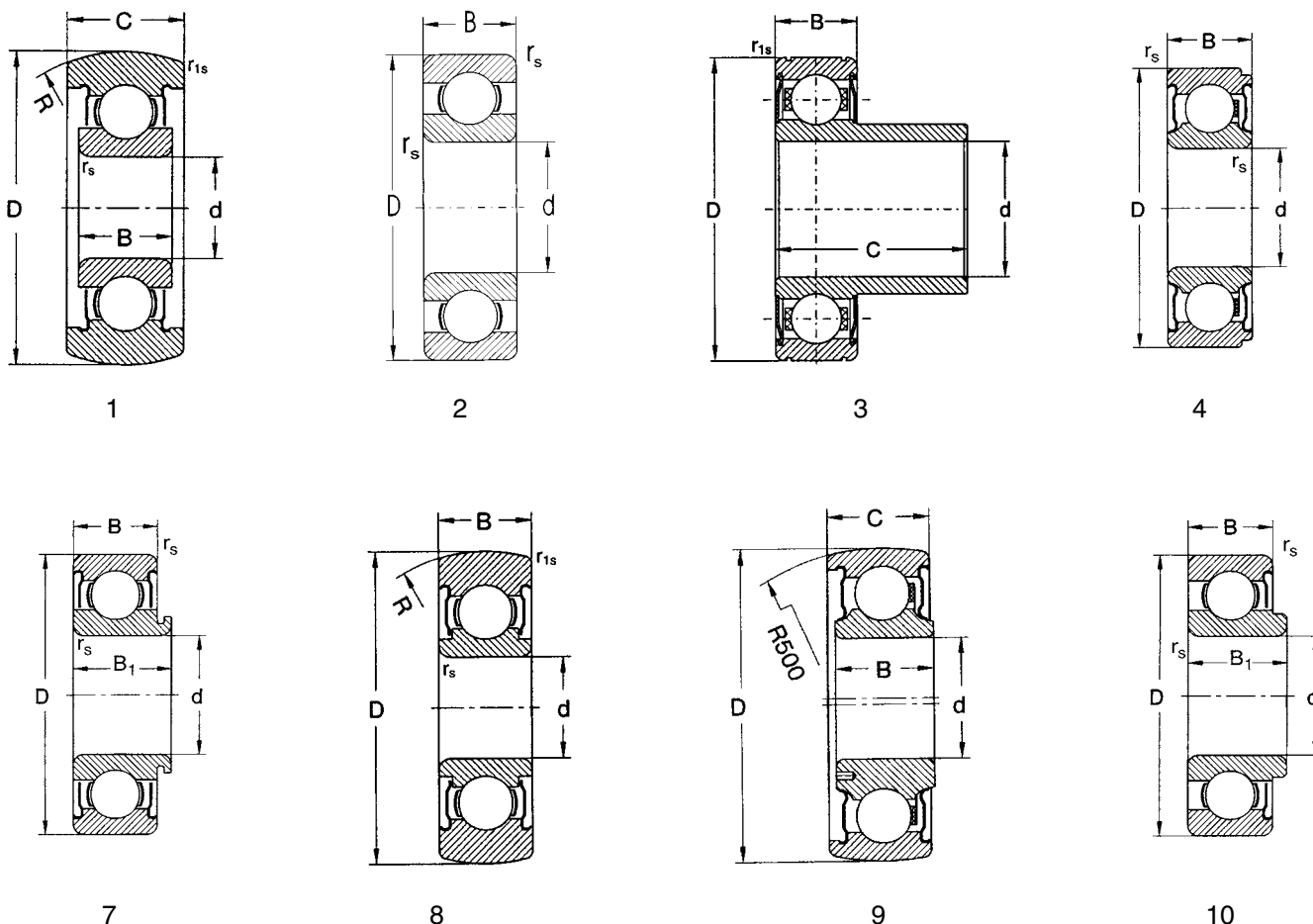


Limiting Speed for Lubrication with		Bearing Designation	Weight	Seals / Shields	Cage	Figure
Grease	Oil					
rpm			kg			
40,000	-	PLC 81-4	0.0025	ZZR	Y	1
40,000	-	PLC 81-1	0.0067	ZZR	Y	2
40,000	-	PLC 81-3	0.0052	ZZR	Y	3
35,000	-	PLC 01-17	0.0047	ZZR	Y, J	4
35,000	-	PLC 01-17-1	0.0046	ZZR	Y, J	5
20,000	24,000	PLC 03-78	0.0800	-	TNH	11
<sup>1)</sup>	-	PLC 01-15	0.0067	-	-	6
35,000	42,000	PLC 01-32	0.0075	-	Y, J	7
35,000	-	PLC 01-45	0.0158	ZZR	TNH	12
35,000	-	PLC 01-16	0.0115	ZZR	Y, J	4
35,000	-	PLC 01-16-1	0.0113	ZZR	Y, J	5
<sup>1)</sup>	-	PLC 02-4	0.0173	-	Y, J	8
24,000	-	PLC 02-12	0.0265	2RSR	J	9
17,000	-	PLC 03-21	0.0365	2RSR	J	10
12,600	17,000	PLC 03-79	0.0694	-	-	13
17,000	32,000	PLC 02-24	0.0310	2RS	TNG	10

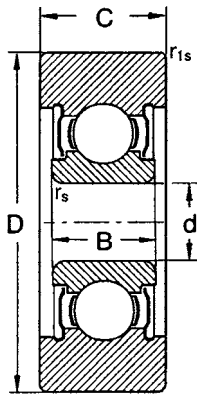
# Single Row Deep Groove Ball Bearings for Special Applications

**B**

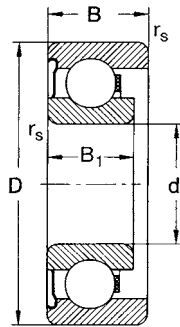


Dimension								Basic Load Rating			
d	D	B	C	rs min	D <sub>1</sub>	B <sub>1</sub>	R	Dynamic C <sub>r</sub>	Static C <sub>or</sub>	Dynamic C <sub>r</sub>	Static C <sub>or</sub>
mm								kN	kN	lbs.	lbs.
12	36	10.0	11.90	60.0	0.6	1.0	-	6.905	3.100	1,552	697
15	42	11.0	-	-	0.6	-	-	7.100	3.760	1,596	845
15.97	40	13.0	28.50	-	-	0.6	-	9.534	4.734	2,143	1,064
16	30	8.0	-	-	0.3	-	-	3.410	2.023	767	455
	40	12.0	14.00	-	0.6	0.6	-	9.534	4.743	2,143	1,066
17	30	10.0	-	-	0.3	-	8	5.400	2.480	1,214	558
	47	12.0	-	-	0.6	-	15	10.000	5.840	2,248	1,313
	47	12.0	-	47.0	0.6	-	-	9.260	4.820	2,082	1,084
	47	12.0	15.00	-	0.6	1.0	-	9.260	4.820	2,082	1,084
	47	12.0	15.00	-	1.0	0.6	-	9.260	4.820	2,082	1,084
56	18.0	19.60	-	-	-	-	-	14.100	7.940	3,170	1,785
	20	47	12.0	-	-	0.6	15	10.000	5.840	2,248	1,313
20	51	15.0	-	-	1.1	-	-	16.000	7.940	3,597	1,785
	52	14.0	-	62.0	-	-	-	12.800	6.310	2,878	1,419
	52	15.0	20.00	-	-	1.1	-	15.866	7.811	3,567	1,756
22	48	36.0	-	-	0.5	-	-	22.800	14.200	5,126	3,192

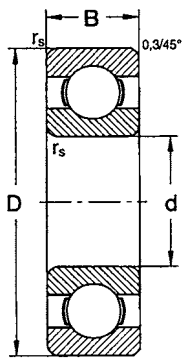
<sup>1)</sup> This bearing is intended for oscillating motion or low frequency of rotation



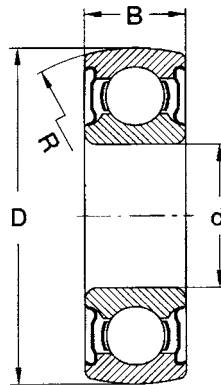
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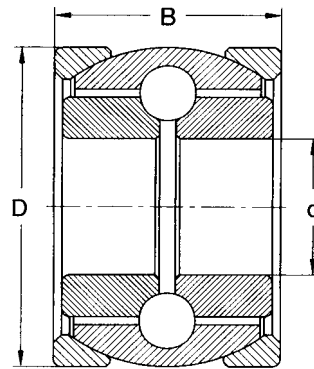
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11



12

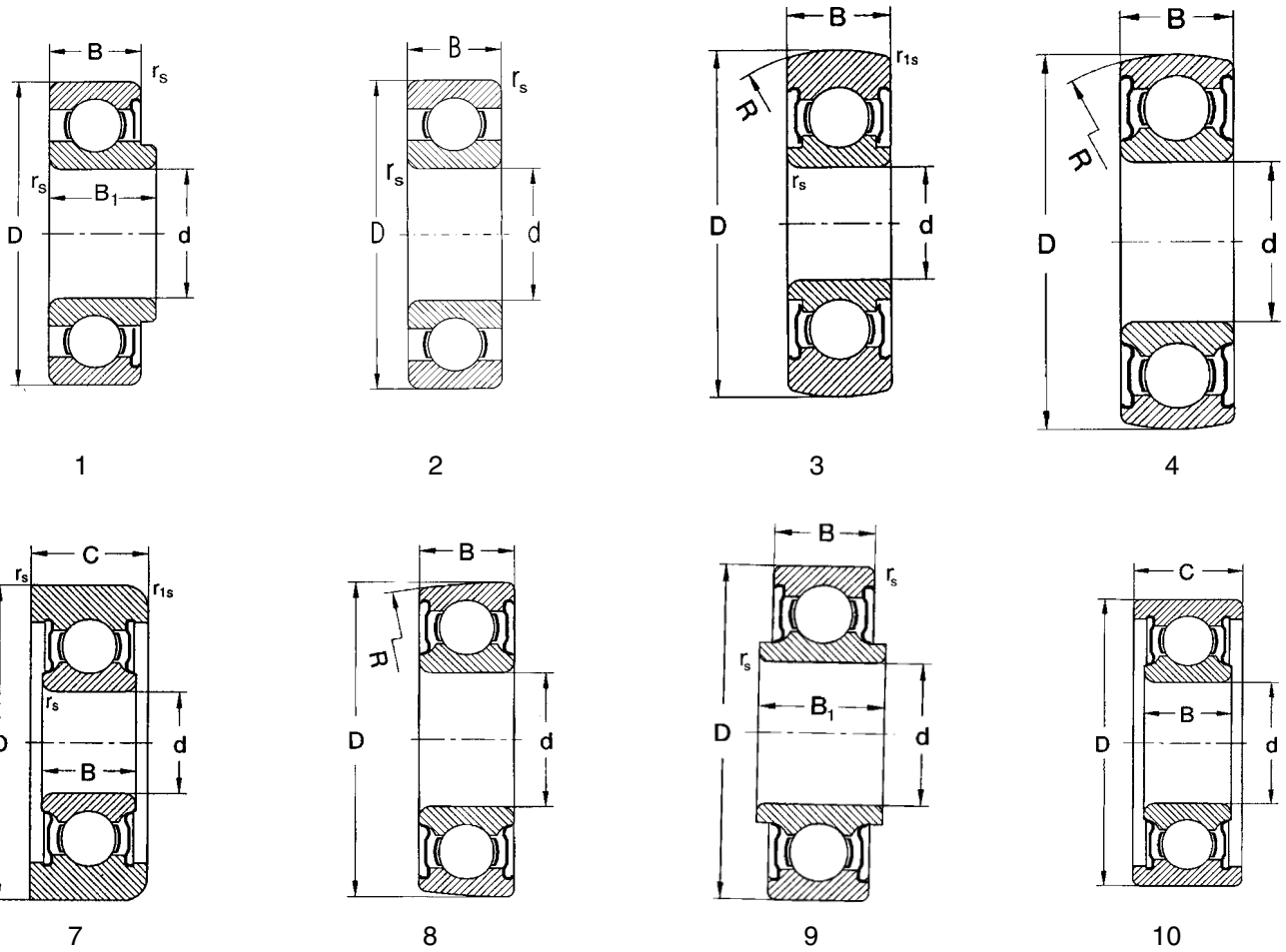


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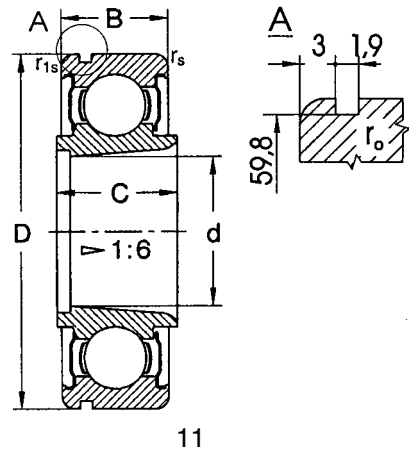
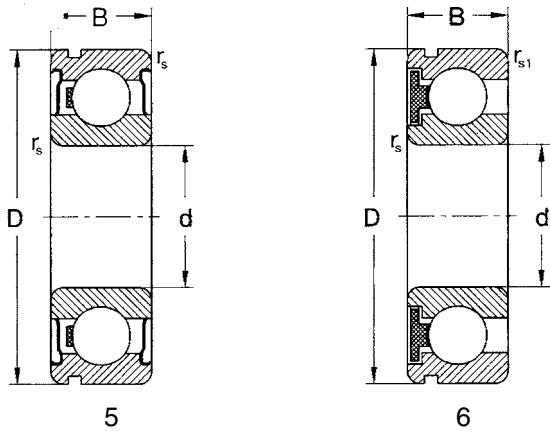
Limiting Speed for Lubrication with		Bearing Designation	Weight	Seals / Shields	Cage	Figure
Grease	Oil					
rpm			kg			
22,000	27,000	PLC 03-80	0.037	-	-	1
20,000	24,000	PLC 03-39	0.082	-	-	2
18,000	21,000	PLC 03-221	0.088	-	-	3
14,000	-	PLC 02-23	0.021	2RS	TNGH	4
18,000	21,000	PLC 03-223	0.073	-	-	5
13,000	21,000	PLC 02-35	0.020	RSR	TNG	6
14,000	-	PLC 03-53-2	0.104	ZZR	J	7
-	-	203ZZ	0.106	ZZ	-	8
18,000	-	PLC 03-06	0.117	-	-	5
18,000	-	PLC 03-52	0.110	-	-	5
8,200	-	PLC 04-53	0.240	-	-	9
14,000	17,000	PLC 03-53-1	0.105	ZR	J	10
14,000	17,000	PLC 04-30	0.126	-	-	11
9,500	-	PLC 04-200	0.117	-	-	12
14,000	17,000	PLC 05-17	0.145	-	-	3
1)	-	PLC 03-9-1	0.286	-	-	13

# Single Row Deep Groove Ball Bearings for Special Applications

**B**



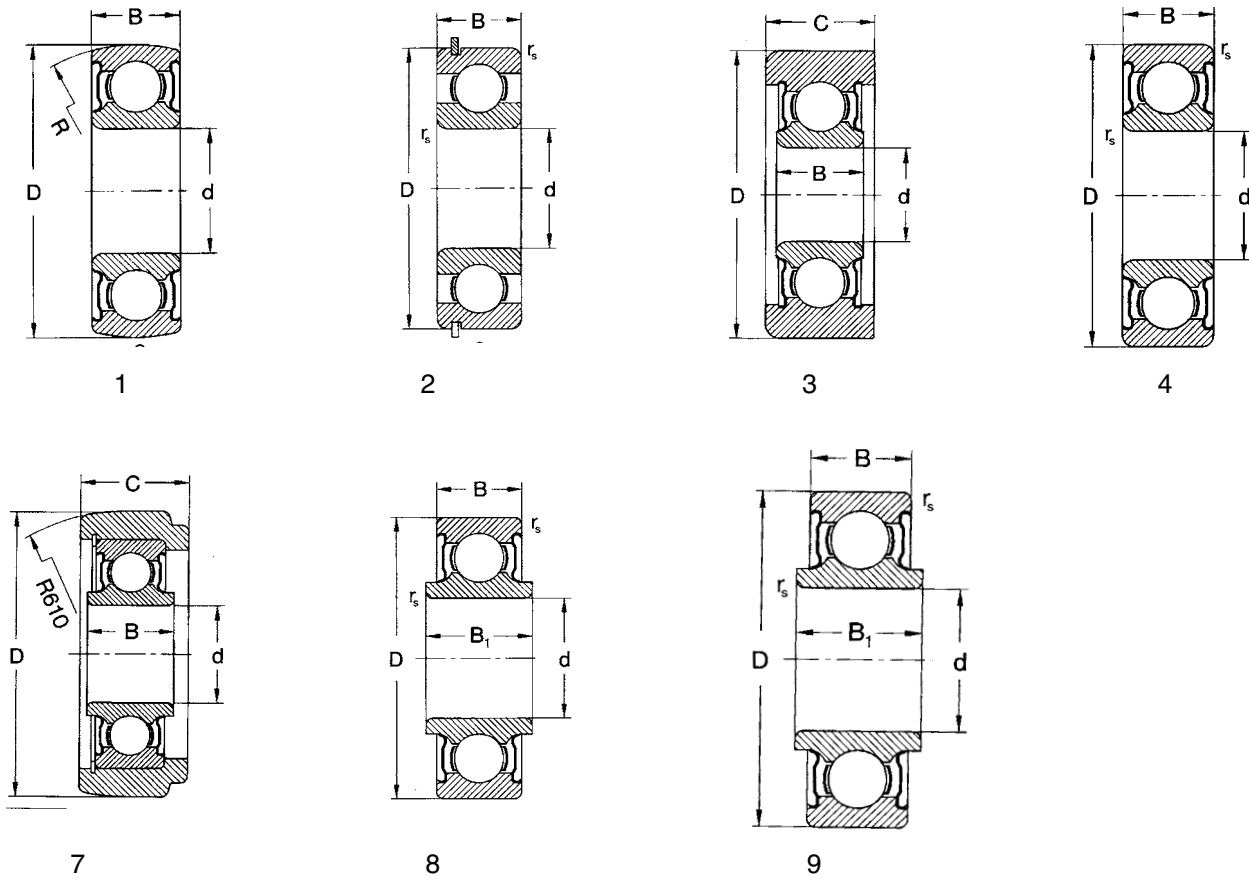
Dimension								Basic Load Rating			
d	D	B	C	rs min	D <sub>1</sub>	B <sub>1</sub>	R	Dynamic C <sub>r</sub>	Static C <sub>or</sub>	Dynamic C <sub>r</sub>	Static C <sub>or</sub>
mm								kN	kN	lbs.	lbs.
25	47	12.0	-	-	0.6	-	15	10.000	5.840	2,248	1,313
	52	12.0	-	-	0.6	-	-	10.000	5.840	2,248	1,313
	62	12.0	-	-	0.6	-	-	19.600	11.200	4,406	2,518
	62	15.0	-	62.0	1.0	-	-	14.100	7.940	3,170	1,785
	62	15.0	-	62.0	-	-	-	14.100	7.080	3,170	1,592
	62	17.0	-	-	1.1	-	-	23.700	12.100	5,328	2,720
	62.5	15.0	-	62.5	1.0	0.6	-	16.443	11.186	3,697	2,515
	65	18.0	-	-	1.1	-	-	24.200	12.800	5,440	2,878
	75	17.0	-	-	1.2	-	-	31.600	17.400	7,104	3,912
	76.2	17.0	25.40	-	-	1.1	8.4	-	20.700	11.200	4,654
30	70	22.0	-	500.0	-	-	-	19.400	11.200	4,361	2,518
	70.15	20.0	-	500.0	-	-	-	19.600	13.700	4,406	3,080
	71.15	22.0	-	500.0	-	-	-	19.600	13.700	4,406	3,080
	72	16.0	-	72.0	-	-	-	19.600	10.000	4,406	2,248
	74.2	16.0	28.00	-	1.0	0.6	-	19.600	11.200	4,406	2,518
	75	21.0	-	-	-	-	-	29.800	15.800	6,699	3,552
	78	22.0	-	500.0	-	-	-	19.400	11.200	4,361	2,518
	78	22.0	-	500.0	-	-	-	19.600	13.700	4,406	3,080
	79	22.0	-	500.0	-	-	-	19.600	13.700	4,406	3,080
	80	37.0	18.00	-	-	-	-	32.900	20.000	7,396	4,496
82	19.0	29.00	-	-	-	-	30.000	15.800	6,744	3,552	
32	80	23.0	-	-	-	-	-	33.300	19.200	7,486	4,316
33.13	62	16.0	18.00	-	1.5	0.8	-	15.956	10.328	3,587	2,322
	62	16.0	18.00	-	1.5	0.8	-	15.956	10.328	3,587	2,322



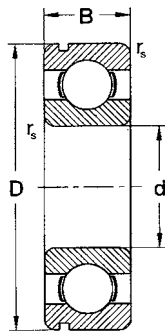
Limiting Speed for Lubrication with		Bearing Designation	Weight	Seals / Shields	Cage	Figure
Grease	Oil					
rpm			kg			
14,000	17,000	PLC 03-53	0.080	ZR	J	1
14,000	17,000	PLC 04-50	0.098	-	-	2
11,000	13,000	PLC 04-56	0.212	-	-	2
-	-	205ZZ	0.225	ZZ	-	3
8,200	-	PLC 04-201	0.225	-	-	4
10,500	-	PLC 04-48/1	0.225	2RS	TNGH	5
11,000	13,000	PLC 04-221	0.237	-	-	3
10,500	-	PLC 04-47/1	0.230	2RS	TNGH	5
10,000	12,000	PLC 05-12	0.660	-	TNGH	6
7,500	-	PLC 05-24	0.620	-	-	7
7,000	-	PLC 05-211	0.456	-	-	4
6,000	-	MR433	0.460	-	-	8
5,900	-	MR434	0.480	-	-	8
7,300	-	PLC 05-200	0.320	-	-	4
11,000	-	PLC 05-13	0.545	-	-	7
5,700	-	PLC 05-214	0.420	-	-	N/A
7,000	-	PLC 05-212	0.456	-	-	4
5,600	-	MR435	0.470	-	-	8
5,600	-	MR436	0.475	-	-	8
5,600	-	PLC 05-19	0.559	-	-	9
6,700	-	PLC 06-20	0.650	-	-	10
5,200	-	PLC 05-215	0.520	-	-	N/A
10,600	12,600	PLC 04-55	0.154	-	-	11
10,600	12,600	PLC 04-208	0.154	-	-	11

# Single Row Deep Groove Ball Bearings for Special Applications

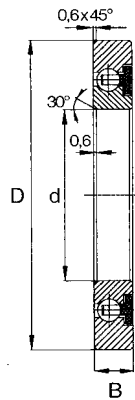
B



Dimension								Basic Load Rating			
d	D	B	C	$r_s$ min	$D_1$	$B_1$	R	Dynamic $C_r$	Static $C_{Or}$	Dynamic $C_r$	Static $C_{Or}$
mm								kN	kN	lbs.	lbs.
35	72	17.0	-	200.0	-	-	-	16.000	10.200	3,597	2,293
	80	17.0	-	80.0	-	-	-	25.600	13.900	5,755	3,125
	80	17.0	-	-	1.1	-	-	25.600	15.300	5,755	3,440
	84.5	17.0	25.00	-	-	-	-	25.600	15.300	5,755	3,440
	85	17.0	-	-	1.1	-	-	25.600	15.300	5,755	3,440
	85	17.0	25.00	-	-	-	-	25.600	15.300	5,755	3,440
	85	23.0	-	-	-	-	-	33.300	19.200	7,486	4,316
	90	23.0	-	-	1.5	-	-	40.600	23.700	9,127	5,328
	91	20.0	31.85	-	-	-	-	25.600	15.300	5,755	3,440
	101.5	21.0	30.00	-	-	-	-	33.500	19.200	7,531	4,316
101.67	21.0	28.38	-	-	-	-	33.500	19.200	7,531	4,316	
110.8	20.0	30.15	-	-	-	-	25.600	15.300	5,755	3,440	
36	58	8.0	-	-	0.6	-	-	8.190	6.700	1,841	1,506
	65	8.0	-	-	0.6	-	-	8.190	6.700	1,841	1,506
40	72	17.0	-	-	-	-	22	16.800	11.400	3,777	2,563
	92	25.0	-	-	-	-	-	40.700	23.900	9,150	5,373
	114	23.0	28.00	-	-	-	-	40.600	23.700	9,127	5,328
	114	23.0	31.75	-	-	-	-	40.600	23.700	9,127	5,328
45	120	37.0	23.00	-	-	-	-	57.300	39.800	12,882	8,947
	127.06	24.5	31.75	-	-	-	-	53.100	31.600	11,937	7,104



5



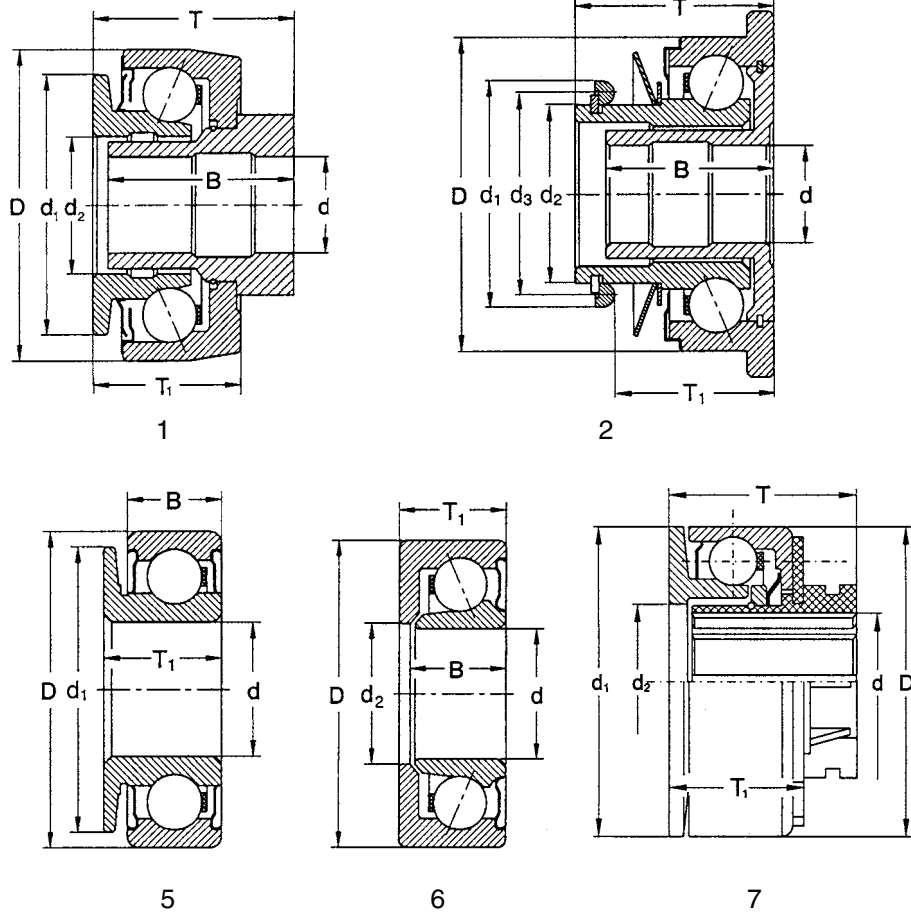
6

**B**

Limiting Speed for Lubrication with		Bearing Designation	Weight	Seals / Shields	Cage	Figure
Grease	Oil					
rpm			kg			
5,600	-	MR457	0.284	-	-	1
6,100	-	PLC 05-201	0.450	-	-	1
9,400	11,000	PLC 05-207	0.590	-	J	2
6,300	-	PLC 06-3-1	0.591	-	-	3
6,300	-	PLC 06-205	0.600	2RS	J	4
6,300	-	PLC 06-3	0.609	-	-	3
5,000	-	PLC 06-206	0.550	-	-	N/A
7,900	9,400	PLC 06-6-2	0.660	-	J	5
9,400	-	PLC 06-22	0.878	-	-	7
5,600	-	PLC 07-2	1.180	-	-	3
5,600	-	PLC 07-2-1	1.150	-	-	3
5,600	-	PLC 07-25	1.074	-	-	7
-	10,000	PLC 04-65-1	0.073	Z	TNGH	6
-	10,000	PLC 04-66-1	0.148	Z	TNGH	6
5,600	-	PLC 05-28	-	-	J	8
4,500	-	PLC 06-207	0.720	-	-	N/A
7,900	-	PLC 07-24	1.480	-	-	3
7,900	-	PLC 07-23	1.580	-	-	3
3,500	-	PLC 07-20	1.270	-	-	9
4,700	-	PLC 08-18	2.100	-	-	3

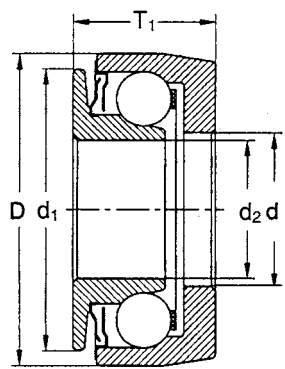
# Single Row Deep Groove Ball Bearings for Special Applications

**B**

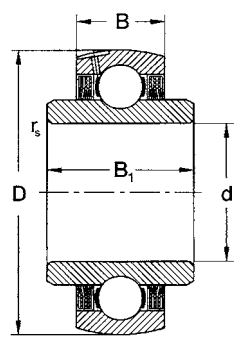


Dimension										Basic Load Rating			
d	D	T	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	B	T <sub>1</sub>	r <sub>s</sub> min	B <sub>1</sub>	Dynamic C <sub>r</sub> kN	Static C <sub>0r</sub> kN	Dynamic C <sub>r</sub> lbs.	Static C <sub>0r</sub> lbs.
mm													
45.2	94.5	50.5	95	57.0	-	16	31.5	-	-	20.300	16.300	4,564	3,664
50	80	-	-	53.0	-	16	20.0	-	-	21.723	16.650	4,884	3,743
55	100	-	-	-	-	33	-	1.1	55	43.000	29.300	9,667	6,587
57	102	56	95	64.6	-	53	37.0	-	-	23.700	19.200	5,328	4,316
62	115	56	102	76.0	-	53	37.0	-	-	27.600	23.300	6,205	5,238
	102	102	95	64.6	-	75	37.0	-	-	23.700	19.200	5,328	4,316
68	102	102	95	64.6	-	75	37.0	-	-	23.700	19.200	5,328	4,316
	115	58	102	76.4	-	55	39.0	-	-	27.600	23.300	6,205	5,238
71	128	51	106	90.0	100	42.5	33.5	-	-	33.500	27.600	7,531	6,205
	128	51	106	90.0	100	42.5	33.5	-	-	33.500	27.600	7,531	6,205
	128	69.7	106	90.0	100	42.5	52.0	-	-	33.500	27.600	7,531	6,205
	110	-	100	70.6	-	-	40.0	-	-	25.200	21.100	5,665	4,743
106	145	-	138	-	-	18	25.0	-	-	23.800	24.300	5,350	5,463





3

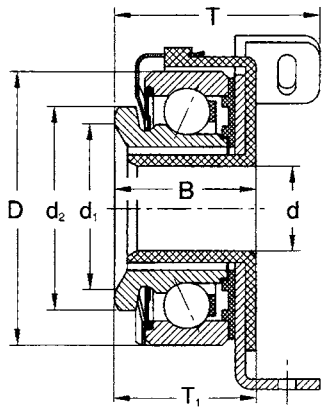


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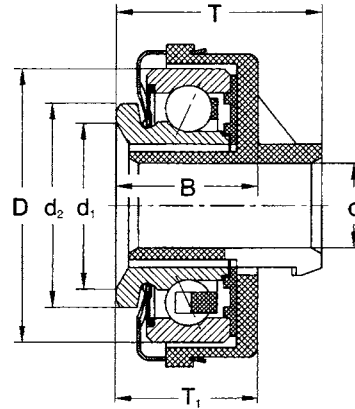
Limiting Speed for Lubrication with		Bearing Designation	Weight	Seals / Shields	Cage	Figure
Grease	Oil					
rpm			kg			
5,300	-	PLC 06-204	0.780	-	-	7
7,900	9,400	PLC 05-36	0.333	-	-	6
4,200	-	PLC 06-11	1.260	2RS	J	4
5,000	-	KZI-4	1.240	-	-	1
4,200	-	PLC 07-22	1.660	-	-	1
5,000	-	PLC 07-11	1.730	-	-	1
5,000	-	PLC 07-12	1.730	-	-	1
4,200	-	KZI-5	1.420	-	-	1
4,000	-	KZI/Z-5	1.880	-	-	2
4,000	-	KZI/Z-5/D	1.870	-	-	2
4,000	-	KZI/Z-5/L	2.380	-	-	2
4,400	-	KZI-4.5	1.180	-	-	3
2,500	-	PLC 08-13	0.940	-	-	5

# Single Row Deep Groove Ball Bearings for Special Applications

B



1



2

Dimension							Basic Load Rating			
d	D	B	d <sub>1</sub>	d <sub>2</sub>	T	T <sub>1</sub>	Dynamic C <sub>r</sub>	Static C <sub>or</sub>	Dynamic C <sub>r</sub>	Static C <sub>or</sub>
mm							kN	kN	lbs.	lbs.
25	54.4	22.5	40	43.5	36	21	12.300	7.790	2,765	1,751
	54.4	24.0	40	43.5	32	24	12.300	7.790	2,765	1,751

Limiting Speed for Lubrication with		Bearing Designation	Weight	Figure
Grease	Oil		kg	
rpm				
7,500	-	PLC 04-23	0.182	1
7,500	-	PLC 04-24	0.149	2