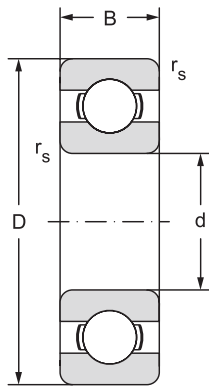
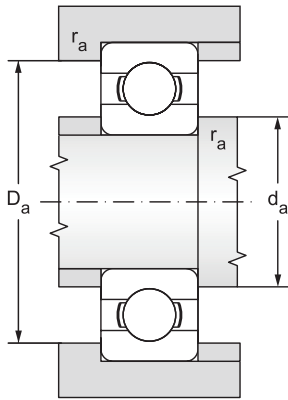


## Electrically insulated ball bearings d = 70 to 150 mm



12.12.2

Main dimensions				Basic load rating		Fatigue load limit
d	D	B	r <sub>s</sub>	dynamic C <sub>r</sub>	static C <sub>or</sub>	P <sub>u</sub>
mm				kN		kN
70	125	24,0	1,5	62,00	43,80	1,991
	150	35,0	2,1	104,00	63,10	2,735
75	130	25,0	1,5	66,18	49,31	2,214
	160	37,0	2,1	114,00	76,40	3,204
80	140	26,0	2,0	72,20	53,10	2,301
	170	37,0	2,1	122,85	86,23	3,506
85	150	28,0	2,0	83,30	63,68	2,670
	180	41,0	3,0	132,51	96,07	3,794
90	160	30,0	2,0	96,20	70,80	2,878
	190	43,0	3,0	144,00	108,00	4,149
95	170	32,0	2,1	108,00	81,00	3,199
	200	45,0	3,0	152,44	117,37	4,393
100	180	34,0	2,1	123,00	92,60	3,557
	215	47,0	3,0	174,00	141,00	5,107
110	200	38,0	2,1	144,00	117,00	4,272
	240	50,0	3,0	203,00	180,00	6,185
120	215	40,0	2,1	144,00	117,00	4,109
	260	55,0	3,0	208,00	186,00	6,134
130	230	40,0	3,0	156,00	132,00	4,472
	280	58,0	4,0	229,00	216,00	6,857
140	250	42,0	3,0	166,00	150,00	4,883
	300	62,0	4,0	251,00	245,00	7,508
150	270	45,0	3,0	190,00	181,00	5,677
	320	65,0	4,0	276,00	285,00	8,451

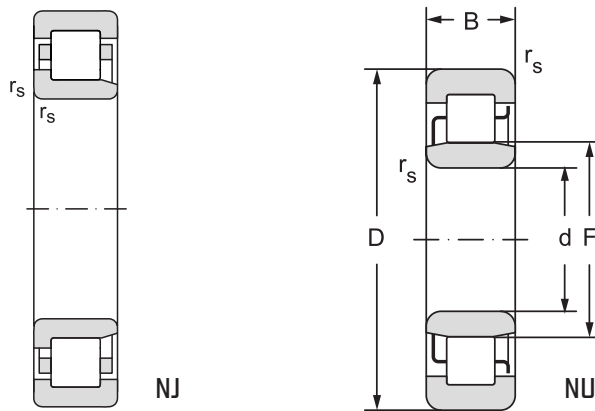


Limiting speed for lubrication with		Bearing designation	Abutment and fillet dimensions			Weight ~ kg
grease	olejem		da min	Da max	ra max	
min <sup>-1</sup>			mm			
5300	6300	6214M TM01	77,0	116,0	1,5	1,07
4700	5600	6314M TM01	81,0	138,0	2,0	2,54
5000	6000	6215M TM01	82,0	122,0	1,5	1,18
4200	5000	6315M TM01	86,0	148,0	2,0	3,06
4700	5600	6216M TM01	90,0	130,0	2,0	1,40
4000	4700	6316M TM01	91,0	158,0	2,0	3,63
4200	5000	6217M TM01	95,0	140,0	2,0	1,80
3800	4500	6317M TM01	98,0	166,0	2,5	4,20
4000	4700	6218M TM01	100,0	150,0	2,0	2,16
3500	4200	6318M TM01	103,0	176,0	2,5	4,95
3800	4500	6219M TM01	107,0	158,0	2,0	2,60
3300	4000	6319M TM01	109,0	186,0	2,5	5,72
3500	4200	6220M TM01	112,0	169,0	2,0	3,13
3200	3800	6320M TM01	113,0	201,0	2,5	7,07
3200	3800	6222M TM01	122,0	188,0	2,0	4,37
2600	3200	6322M TM01	123,0	227,0	2,5	9,58
3000	3500	6224M TM01	132,0	203,0	2,0	5,15
2500	3000	6324M TM01	134,0	246,0	2,5	12,5
2600	3100	6226M TM01	144,0	216,0	2,5	5,75
2350	2800	6326M TM01	147,0	263,0	3,0	15,2
2500	3000	6228M TM01	154,0	236,0	2,5	7,56
2350	2800	6328M TM01	157,0	283,0	3,0	21,8
2200	2700	6230M TM01	164,0	256,0	2,5	9,85
2000	2400	6330M TM01	167,0	303,0	3,0	24,0



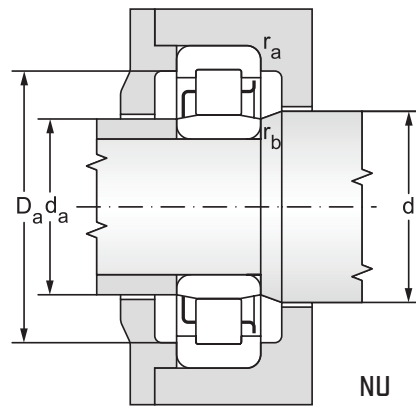
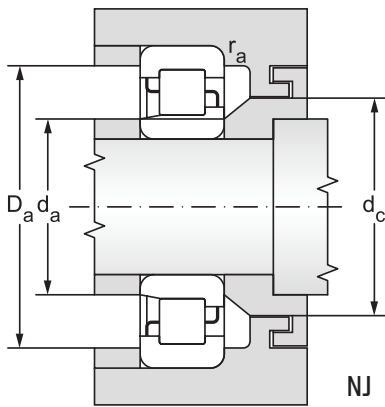
# Electrically insulated cylindrical roller bearings $d = 70$ to $150$ mm

$d = 70$  to  $100$  mm



12.12.3

Main dimensions							Bearing designation	Basic load rating	
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	F	s <sub>1)</sub>		dynamic C <sub>r</sub>	static C <sub>0r</sub>
mm								kN	
70	125	24,00	1,5	1,5	83,500	1,6	NU214EM TM01	119,0	137,0
	125	24,00	1,5	1,5	83,500	1,6	NJ214EM TM01	119,0	137,0
	125	31,00	1,5	1,5	83,500	1,6	NU2214EM TM01	156,0	194,0
	125	31,00	1,5	1,5	83,500	1,6	NJ2214EM TM01	156,0	194,0
	150	35,00	2,1	2,1	89,000	1,5	NU314EM TM01	205,0	222,0
	150	35,00	2,1	2,1	89,000	1,5	NJ314EM TM01	205,0	222,0
75	130	25,00	1,5	1,5	88,500	1,6	NU215EM TM01	130,0	156,0
	130	25,00	1,5	1,5	88,500	1,6	NJ215EM TM01	130,0	156,0
	130	31,00	1,5	1,5	88,500	2,1	NU2215EM TM01	162,0	207,0
	130	31,00	1,5	1,5	88,500	2,1	NJ2215EM TM01	162,0	207,0
	160	37,00	2,1	2,1	95,000	1,5	NU315EM TM01	240,0	263,0
	160	37,00	2,1	2,1	95,000	1,5	NJ315EM TM01	240,0	263,0
80	140	26,00	2,0	2,0	95,300	2,0	NU216EM TM01	139,0	167,0
	140	26,00	2,0	2,0	95,300	2,0	NJ216EM TM01	139,0	167,0
	170	39,00	2,1	2,1	101,000	1,5	NU316EM TM01	256,0	282,0
	170	39,00	2,1	2,1	101,000	1,5	NJ316EM TM01	256,0	282,0
85	150	28,00	2,0	2,0	100,500	2,0	NU217EM TM01	167,0	199,0
	150	28,00	2,0	2,0	100,500	2,0	NJ217EM TM01	167,0	199,0
	180	41,00	3,0	3,0	108,000	2,0	NU317EM TM01	291,0	330,0
	180	41,00	3,0	3,0	108,000	2,0	NJ317EM TM01	291,0	330,0
90	160	30,00	2,0	2,0	107,000	2,0	NU218EM TM01	182,0	217,0
	160	30,00	2,0	2,0	107,000	2,0	NJ218EM TM01	182,0	217,0
	190	43,00	3,0	3,0	113,500	2,0	NU318EM TM01	315,0	355,0
	190	43,00	3,0	3,0	113,500	2,0	NJ318EM TM01	315,0	355,0
95	170	32,00	2,1	2,1	112,500	2,0	NU219EM TM01	220,0	265,0
	170	32,00	2,1	2,1	112,500	2,0	NJ219EM TM01	220,0	265,0
	200	45,00	3,0	3,0	121,500	1,9	NU319EM TM01	335,0	385,0
	200	45,00	3,0	3,0	121,500	1,9	NJ319EM TM01	335,0	385,0
100	180	34,00	2,1	2,1	119,000	2,0	NU220EM TM01	249,0	305,0
	180	34,00	2,1	2,1	119,000	2,0	NJ220EM TM01	249,0	305,0
	215	47,00	3,0	3,0	127,500	2,0	NU320EM TM01	380,0	425,0
	215	47,00	3,0	3,0	127,500	2,0	NJ320EM TM01	380,0	425,0



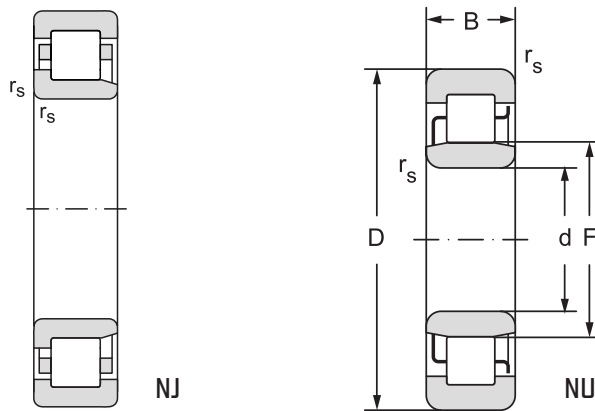
<sup>1)</sup> Admissible axial movement

Fatigue load limit	Limiting speed for lubrication with		Abutment and fillet dimensions							Weight
	$P_u$	grease	oil	d	$d_a$ min	$d_a$ max	$d_b$ min	$D_a$ max	$r_a$ max	
kN	min <sup>-1</sup>		mm							kg
16,71	5000	6300	70	77	82,0	86,0	116	1,5	1,5	1,30
16,71	5000	6300		77	82,0	86,0	116	1,5	1,5	1,30
23,66	4500	5600		77	82,0	86,0	116	1,5	1,5	1,50
23,66	4500	5600		77	82,0	86,0	116	1,5	1,5	1,50
26,31	4000	5000		81	85,0	92,0	138	2,0	2,0	3,10
26,31	4000	5000		81	85,0	92,0	138	2,0	2,0	3,10
18,88	4800	6000	75	82	85,0	90,0	121	1,5	1,5	1,50
18,88	4800	6000		82	85,0	90,0	121	1,5	1,5	1,50
25,06	4300	5300		82	85,0	90,0	121	1,5	1,5	1,60
25,06	4300	5300		82	85,0	90,0	121	1,5	1,5	1,60
30,56	3800	4800		86	93,0	97,0	148	2,0	2,0	3,70
30,56	3800	4800		86	93,0	97,0	148	2,0	2,0	3,70
19,79	4500	5300	80	90	92,0	97,0	130	2,0	2,0	1,70
19,79	4500	5300		90	92,0	97,0	130	2,0	2,0	1,70
32,16	3600	4300		99	97,0	105,0	158	2,0	2,0	4,50
32,16	3600	4300		99	97,0	105,0	158	2,0	2,0	4,50
23,12	4300	5000	85	95	99,0	104,0	140	2,0	2,0	2,10
23,12	4300	5000		95	99,0	104,0	140	2,0	2,0	2,10
36,99	3300	4000		98	103,0	110,0	166	2,5	2,5	5,30
36,99	3300	4000		98	103,0	110,0	166	2,5	2,5	5,30
24,75	4000	4800	90	100	105,0	109,0	150	2,0	2,0	2,60
24,75	4000	4800		100	105,0	109,0	150	2,0	2,0	2,60
39,14	3200	3800		103	110,0	116,0	176	2,5	2,5	6,10
39,14	3200	3800		103	110,0	116,0	176	2,5	2,5	6,10
29,70	3800	4500	95	107	111,0	116,0	158	2,0	2,0	3,20
29,70	3800	4500		107	111,0	116,0	158	2,0	2,0	3,20
41,78	3000	3600		109	119,0	124,0	186	2,5	2,5	7,10
41,78	3000	3600		109	119,0	124,0	186	2,5	2,5	7,10
33,62	3600	4300	100	112	117,0	122,0	168	2,0	2,0	3,80
33,62	3600	4300		112	117,0	122,0	168	2,0	2,0	3,80
45,23	2800	3400		113	125,0	132,0	201	2,0	2,0	8,60
45,23	2800	3400		113	125,0	132,0	201	2,0	2,0	8,60



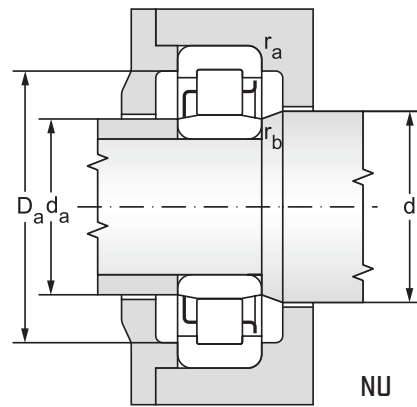
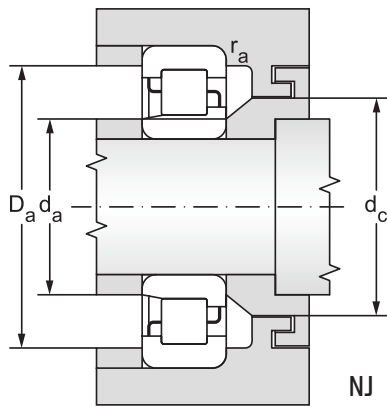
Electrically insulated cylindrical roller bearings

d = 110 to 150 mm



12.12.3

Main dimensions							Bearing designation	Basic load rating	
d	D	B	r <sub>s</sub> min	r <sub>1s</sub> min	F	s <sub>1j</sub>		dynamic C <sub>r</sub>	static C <sub>or</sub>
mm								kN	
110	200	38,00	2,1	2,1	132,500	2,5	NU222EM TM01	293,0	365,0
	200	38,00	2,1	2,1	132,500	2,5	NJ222EM TM01	293,0	365,0
	240	50,00	3,0	3,0	143,000	2,7	NU322EM TM01	450,0	525,0
	240	50,00	3,0	3,0	143,000	2,7	NJ322EM TM01	450,0	525,0
120	180	28,00	2,0	1,1	135,000	2,0	NU1024M TM01	131,0	168,0
	215	40,00	2,1	2,1	143,500	2,5	NU224EM TM01	335,0	420,0
	215	40,00	2,1	2,1	143,500	2,5	NJ224EM TM01	335,0	420,0
	260	55,00	3,0	3,0	154,000	2,7	NU324EM TM01	530,0	610,0
	260	55,00	3,0	3,0	154,000	2,7	NJ324EM TM01	530,0	610,0
130	200	33,00	2,0	1,1	148,000	2,0	NU1026M TM01	162,0	203,0
	230	40,00	3,0	3,0	153,500	2,5	NU226EM TM01	365,0	455,0
	230	40,00	3,0	3,0	153,500	2,5	NJ226EM TM01	365,0	455,0
	280	58,00	4,0	4,0	167,000	2,9	NU326EM TM01	615,0	735,0
	280	58,00	4,0	4,0	167,000	2,9	NJ326EM TM01	615,0	735,0
140	210	33,00	2,0	1,1	158,000	2,0	NU1028M TM01	176,0	250,0
	250	42,00	3,0	3,0	169,000	2,5	NU228EM TM01	395,0	515,0
	250	42,00	3,0	3,0	169,000	2,5	NJ228EM TM01	395,0	515,0
	300	62,00	4,0	4,0	180,000	2,7	NU328EM TM01	665,0	795,0
	300	62,00	4,0	4,0	180,000	2,7	NJ328EM TM01	665,0	795,0
150	225	35,00	2,1	1,5	169,500	2,0	NU1030M TM01	192,0	251,0
	270	45,00	3,0	3,0	182,000	2,4	NU230EM TM01	450,0	595,0
	270	45,00	3,0	3,0	182,000	2,4	NJ230EM TM01	450,0	595,0
	320	65,00	4,0	4,0	193,000	2,7	NU330EM TM01	760,0	920,0
	320	65,00	4,0	4,0	193,000	2,7	NJ330EM TM01	760,0	920,0



<sup>1)</sup> Admissible axial movement

Fatigue load limit	Limiting speed for lubrication with		Abutment and fillet dimensions							Weight
	$P_u$	grease	oil	d	$d_a$ min	$d_a$ max	$d_b$ min	$D_a$ max	$r_a$ max	
kN	$\text{min}^{-1}$		mm							kg
39,03	3200	3800	110	122	125,0	135,0	188	2,0	2,0	5,40
39,03	3200	3800		122	125,0	135,0	188	2,0	2,0	5,40
54,13	2600	3000		124	135,0	145,0	226	2,5	2,5	11,8
54,13	2600	3000		124	135,0	145,0	226	2,5	2,5	11,8
18,14	3300	4000	120	128	131,0	138,0	171	2,0	1,0	2,45
43,88	3000	3400		132	138,0	146,0	203	2,0	2,0	6,40
43,88	3000	3400		132	138,0	146,0	203	2,0	2,0	6,40
61,36	2200	2800		134	145,0	156,0	246	2,5	2,5	15,0
61,36	2200	2800		134	145,0	156,0	246	2,5	2,5	15,0
21,30	3200	3800	130	138	143,0	151,0	191	2,0	1,0	3,75
46,52	2600	3200		144	150,0	158,0	216	2,5	2,5	8,00
46,52	2600	3200		144	150,0	158,0	216	2,5	2,5	8,00
72,27	2200	2600		148	155,0	169,0	262	3,0	3,0	18,7
72,27	2200	2600		148	155,0	169,0	262	3,0	3,0	18,7
25,78	3000	3600	140	149	153,0	161,0	201	2,0	1,0	3,90
51,40	2400	3000		154	160,0	171,0	236	2,5	2,5	9,40
51,40	2400	3000		154	160,0	171,0	236	2,5	2,5	9,40
76,53	2000	2400		158	166,0	182,0	282	3,0	3,0	23,0
76,53	2000	2400		158	166,0	182,0	282	3,0	3,0	23,0
25,35	2700	3200	150	159	165,0	173,0	213	2,0	1,5	4,85
58,08	2200	2800		164	170,0	184,0	256	2,5	2,5	12,0
58,08	2200	2800		164	170,0	184,0	256	2,5	2,5	12,0
86,83	1800	2200		168	185,0	195,0	302	3,0	3,0	27,0
86,83	1800	2200		168	185,0	195,0	302	3,0	3,0	27,0

