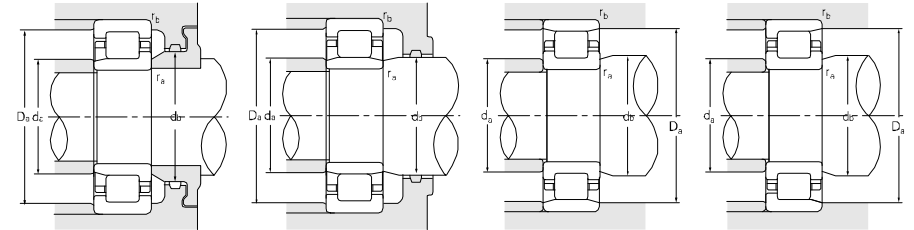
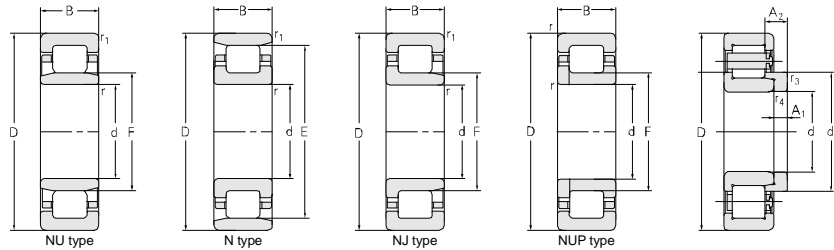


# Single-row Cylindrical Roller Bearing

d 140 mm



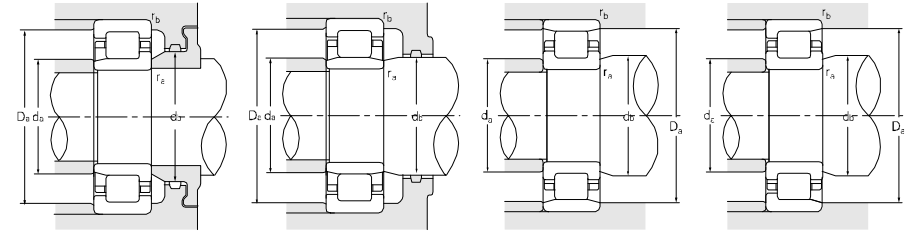
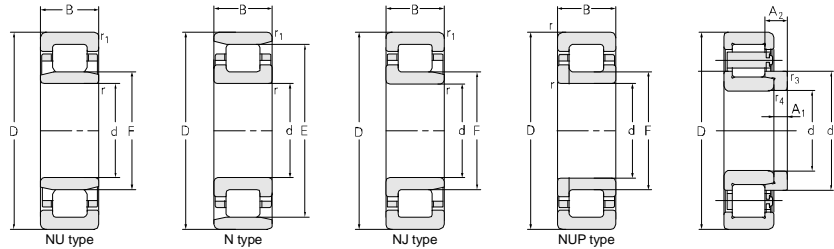
Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm						kN		r/min			
<b>140</b>	190	30	1.5	1.1	178	184	315	3000	3600	<b>NF2928M</b>	
	190	30	1.5	1.5	152	184	315	3000	3600	<b>NJ2928M</b>	
	210	33	2	1.1	158	183	263	3000	3600	<b>NU1028M</b>	
	210	33	2	1.1	158	183	263	3000	3600	<b>FL-NU1028M</b>	
	210	33	2	1.1	158	195	287	3000	3600	<b>NJ1028M</b>	
	210	53	2	1.1	158	358	630	2600	3400	<b>NU3028M</b>	
	220	36	2.7	2.3	160	245	345	660	1300	<b>NU1128X3M</b>	
	250	42	3	3		221	319	410	2400	3000	<b>N228Q1</b>
	250	42	3	3		221	341	450	2000	2600	<b>NCF228J</b>
	250	42	3	3		221	363	490	2400	3000	<b>N228M</b>
	250	42	3	3	169		363	490	2000	2600	<b>NU228M</b>
	250	42	3	3	169		363	490	2000	2600	<b>NJ228M</b>
	250	42	3	3	169		363	490	2000	2600	<b>NUP228M</b>
	250	42	3	3		225	402	530	2400	3000	<b>N228E</b>
	250	42	3	3	169		402	530	2000	2600	<b>NJ228E</b>
	250	42	3	3	169		402	530	2000	2600	<b>NU228E</b>
	250	42	3	3	169		400	530	2000	2600	<b>NU228EM</b>
	250	42	3	3	169		400	530	2000	2600	<b>NU228EMA</b>
	250	42	3	3	169		400	530	2000	2600	<b>NU228EM/C9</b>
	250	42	3	3	169		400	530	2000	2600	<b>NU228EM/W124</b>
	250	42	3	3	169		402	530	2000	2600	<b>NU228EQ1</b>
	250	42	3	3	169		350	470	2000	2600	<b>NU228M-DT</b>
	250	42	3	3		225	400	530	2000	2600	<b>N228EM</b>
	250	42	3	3	169		365	490	2000	2600	<b>NJ228Q1</b>
	250	68	3	3	169		570	840	2000	2600	<b>NU2228EM</b>
	250	68	3	3	169		510	755	2000	2600	<b>NJP2228Q1/C4S0</b>
	250	68	3	3	169		510	755	2000	2600	<b>NJ2228Q1/C4S0</b>
	250	68	3	3	169		574	836	2000	2600	<b>FL-NU2228EMA/C3</b>
	250	68	3	3	169		480	700	2000	2600	<b>FL-NJ2228M/P6</b>
	250	68	3	3	169		506	755	2000	2600	<b>NU2228M</b>
250	68	3	3	169		506	755	2000	2600	<b>NJ2228M</b>	
250	68	3	3	169		517	770	2000	2600	<b>NJ2228M/C4YA8</b>	
250	68	3	3	169		572	840	2000	2600	<b>NJ2228E</b>	
250	68	3	3	169		572	840	2000	2600	<b>NU2228E</b>	
250	68	3	3		225	570	840	2000	2600	<b>N2228E</b>	
250	80	3	3	169		682	1040	2000	2600	<b>NJ3228X2M</b>	

Abutment and fillet dimensions								Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>	r <sub>bmax</sub>					A1	A2	r <sub>3,4</sub>
mm								kg	kg	mm			
146.5	155	161	181		1	1		2.59					
146.5	155	161	181		2	1		2.6					
146.5	155	161	201		2	1		3.89					
146.5	155	161	201		2	1		3.89					
146.5	155	161	201		2	1		4.01					
147	154	162	200		2	1		7.64					
151	157	163	209		2	2		5.03					
153	218		237	225	2.5	2.5		8.66					
153			237	225	2.5	2.5		7.77					
153	218		237	225	2.5	2.5		9.14					
153	166	172	237		2.5	2.5		9.16					
153	166	183	237		2.5	2.5		9.38					
153		183	237		2.5	2.5		9.51					
153	221		237	232	2.5	2.5		9.01					
150	167	181	237		2.5	2.5		9.20					
150	167	171	237		2.5	2.5		9.05					
150	167	171	237		2.5	2.5		9.23					
150	167	171	237		2.5	2.5		9.11					
150	167	171	237		2.5	2.5		9.23					
150	167	171	237		2.5	2.5		9.23					
153	166	172	237		2.5	2.5		9.37					
153	166	172	237		2.5	2.5		9.16					
153	221		237	232	2.5	2.5		9.19					
153	166	183	237		2.5	2.5		9.24					
153	164	172	237		2.5	2.5		14.3					
153	164	183	237		2.5	2.5		15.1					
153	164	183	237		2.5	2.5		15.1					
153	164	172	237		2.5	2.5		14.2					
153	164	183	237		2.5	2.5		14.8					
153	164	172	237		2.5	2.5		14.4	HJ2228	1.13	11	24.68	3
153	164	183	237		2.5	2.5		14.8	HJ2228	1.13	11	24.68	3
153	164	183	237		2.5	2.5		15.0	HJ2228	1.13	11	24.68	3
153	164	183	237		2.5	2.5		14.5					
153	164	172	237		2.5	2.5		14.2					
154	218	224	236		2.5	2.5		14.2					
153	164	183	237		2.5	2.5		17.8					

# Single-row Cylindrical Roller Bearing



d 140~150 mm



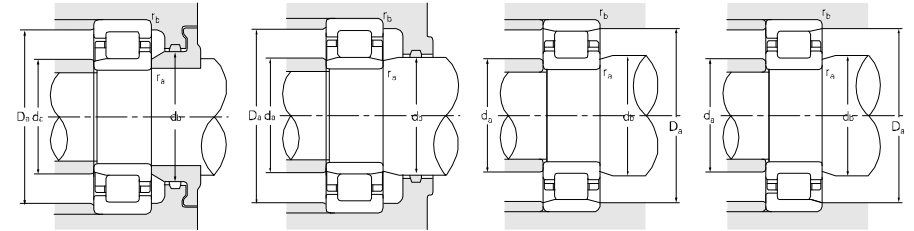
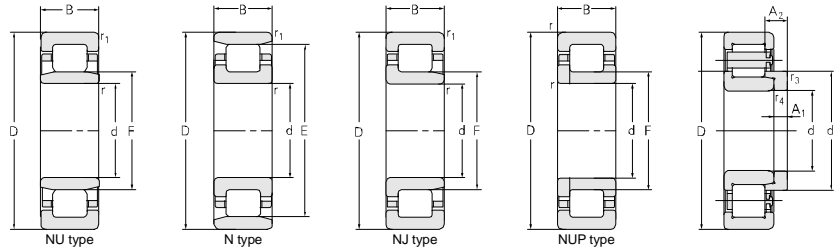
Principal dimensions	Basic load ratings		Limit speed ratings		Designations							
	d	D	B	r <sub>1smin</sub>		r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>Or</sub>	Grease	Oil
mm	kN					r/min						
<b>140</b>	250	82.5	5.1	3	168.46	693	1060	2000	2600	<b>NU5228XPC3</b>		
	250	82.5	5.1	3	168.46	640	980	2000	2600	<b>NU3228X2M/C9YA6</b>		
	250	100	3	3	169	506	755	2000	2600	<b>NU2228MWB</b>		
	300	62	4	4		260	660	810	1900	2400	<b>N328M</b>	
	300	62	3.7	3.7		260	655	805	1900	2400	<b>NF328M</b>	
	300	62	4	4	180	660	810	1800	2200	<b>NJ328M</b>		
	300	62	4	4	180	660	810	1800	2200	<b>NU328M</b>		
	300	62	4	4	180	660	810	1800	2200	<b>NU328Q1/S0</b>		
	300	62	4	4	180	660	810	1800	2200	<b>NUP328M</b>		
	300	62	4	4	180	655	805	1800	2200	<b>NJ328Q1</b>		
	300	62	4	4	180	715	880	1800	2200	<b>NU328EM</b>		
	300	62	4	4	180	655	805	1800	2200	<b>NU328M-DT</b>		
	300	102	4	4		260	960	1310	1800	2200	<b>N2328M</b>	
	300	102	4	4	180	960	1310	1800	2200	<b>NU2328M</b>		
	300	102	4	4	180	1000	1400	1800	2200	<b>NJ2328M/YA8</b>		
	300	102	4	4	180	960	1310	1800	2200	<b>NJ2328M</b>		
	300	102	4	4	180	960	1310	1800	2200	<b>NJ2328M/W20</b>		
	360	82	5	5	196	1010	1200	1800	2200	<b>NJ428M</b>		
360	82	6	6	196	950	1120	1800	2200	<b>NJ428MA/YAD</b>			
<b>149.959</b>	320	65	3	3	189.796	864	930	1700	2000	<b>NU3/149X4EM</b>		
	320	65	3	3	190.144	880	950	1700	2000	<b>NU3/149X4Q1/HAYB2</b>		
<b>150</b>	210	28	4	3	165	171	270	2700	3300	<b>NJ1930NB1M/YA16</b>		
	210	28	3	4	165	171	270	2700	3300	<b>NJ1930B1M/YA6</b>		
	210	28	2	4	165	170	270	2700	3300	<b>NJ1930B1M/YA6-1</b>		
	215.88	28	4	3		195	180	290	2700	3300	<b>NF1930X1WCM/YA6</b>	
	225	35	2.1	1.5	169.5	212	310	2600	3200	<b>NJ1030M</b>		
	225	35	2.1	2.1	169.5	212	310	2600	3200	<b>NU1030M</b>		
	225	35	2	1.5	169.5	238	320	2600	3200	<b>NU1030Q1/HAYA6</b>		
	225	56	2.1	2.1	169.5	363	620	2400	3000	<b>NU3030M/P6</b>		
	270	45	3	3		238	418	565	2000	2600	<b>N230M</b>	
	270	45	3	3		238	405	550	2000	2600	<b>NF230M</b>	
	270	45	3	3	182	418	565	1900	2400	<b>NU230M</b>		
	270	45	3	3	182	418	565	1900	2400	<b>NJ230M</b>		
	270	45	3	3	182	418	565	1900	2400	<b>NUP230M</b>		
	270	45	3	3		242	457	610	1900	2400	<b>N230E</b>	

Abutment and fillet dimensions				Weight		Model Weight		Separate thrust collar				
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>	r <sub>bmax</sub>	kg	kg	A1	A2	r <sub>3,4</sub>	
mm	mm						kg	kg	mm			
155	166	172	237		2.5	3	18.3					
155	166	172	237		2.5	3	18.3					
153	164	172	237		2.5	2.5	16.2					
156	256		284	264	3	3	21.9					
156			284	264	3	3	21.8					
156	176	199	284		3	3	22.6	HJ328	1.2	15	25.69	4
156	176	183	284		3	3	22.2	HJ328	1.2	15	25.69	4
156	176	183	284		3	3	21.7	HJ328	1.2	15	25.69	4
156		199	284		3	3	22.3					
156	176	199	284		3	3	22.1	HJ328	1.2	15	25.69	4
156	176	183	284		3	3	21.8					
156	176	183	284		3	3	21.9	HJ328	1.2	15	25.69	4
156	256		284	264	3	3	34.6					
156	176	183	284		3	3	33.6	HJ2328	2.34	15	33.17	3
156	176	199	284		3	3	34.7	HJ2328	2.34	15	33.17	3
156	176	199	284		3	3	34.8	HJ2328	2.34	15	33.17	3
156	176	199	284		3	3	34.8	HJ2328	2.34	15	33.17	3
160	192	219	340		4	4	46.3					
160	192	219	340		4	4	48.6					
166	189	196	304		3	3	26.4					
166	189	196	304		3	3	26.7					
166	189	165	180		3	3	2.86					
166	189	165	180		3	3	2.94					
166	189	165	180		3	3	2.94					
136.5	145	151	191		3	2	4.18					
159	166	178	214		2	2	5.05					
159	166	172	214		2	2	4.94					
159	166	172	214		2	2	5.13					
159	166	172	214		2	2	7.99					
163	234		257	242	2.5	2.5	11.6					
163	234		257	242	2.5	2.5	12.1					
163	178	185	257		2.5	2.5	11.8					
163	178	197	257		2.5	2.5	12.0					
163		197	257		2.5	2.5	12.3					
163	238		257	246	2.5	2.5	11.5					

# Single-row Cylindrical Roller Bearing



d 150 mm

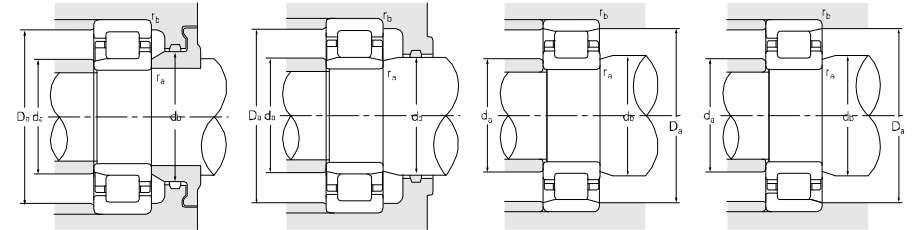
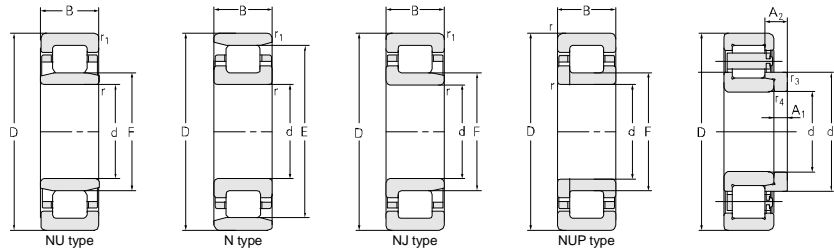


Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm						kN		r/min			
150	270	45	3	3	182		457	610	1900	2400	NU230E
	270	45	3	3	182		435	570	1900	2400	NU230EM/C9
	270	45	3	3	182		435	570	1900	2400	NU230EM/W124
	270	45	3	3	182		457	610	1900	2400	NU230EQ1
	270	45	3	3	182		457	610	1900	2400	NJ230E
	270	45	3	3	182		405	550	2000	2600	NU230M-DT
	270	45	3	3	182		435	570	2000	2600	NU230EMA
	270	73	3	3	182		634	925	1900	2400	FL-NU2230EMA/C3
	270	73	3	3	182		660	980	1900	2400	NJ2230E
	270	88.9	2.6	6.4	181.53		1020	1610	1800	2200	NU5230XPC3
	270	88.9	2.6	7.5	181.53		980	1550	1800	2200	NU3230X2M/C9YA6
	320	65	4	4		277	715	890	1700	2000	N330M
	320	65	4	4		277	815	1010	1700	2000	N330ENM
	320	65	4	4	193		715	890	1700	2000	NU330M
	320	65	4	4	193		715	890	1700	2000	NJ330M
	320	65	4	4	193		715	890	1700	2000	NUP330M
	320	65	4	4	193		814	1010	1700	2000	NU330EQ1
	320	65	4	4	193		814	1010	1700	2000	NU330EQ1/C9
	320	65	4	4	193		814	1010	1700	2000	NJ330EM
	320	65	4	4	193		996	920	1700	2000	NU330EQ1/YB2
	320	108	4	4	193		814	1010	1700	2000	NU330EWBM
	320	108	4	4	193		1030	1420	1700	2000	NUP2330M
	320	108	4	4		277	1070	1480	1700	2000	NF2330M
	320	108	4	4	193		1070	1480	1700	2000	NU2330M
	320	108	4	4	193		1141	1570	1700	2000	NU2330MA
	320	108	4	4	193		1140	1570	1700	2000	NU2330EMA
	320	108	4	4	193		1030	1420	1700	2000	NJ2330M
	320	108	4	4	193		1070	1480	1700	2000	NJ2330M/YA8-1
	320	108	4	4	193		1070	1480	1700	2000	NJ2330M/YA8
	320	108	4	4	193		1070	1480	1700	2000	NJ2330M/C4W124YA8
	320	108	4	4		277	1030	1420	1700	2000	N2330M
	320	108	4	4	193		1140	1570	1700	2000	FL-NU2330EMA/C3
320	128	4	4	193		1320	1880	1400	1800	NJ3330M	
320	128	4	4	193		1320	1870	1400	1800	NJ330X2EM	

Abutment and fillet dimensions						Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>				r <sub>bmax</sub>	A1	A2
mm						kg	kg	mm			
163	178	185	247		2.5	2.5	11.2				
163	178	185	247		2.5	2.5	11.3				
163	178	185	247		2.5	2.5	11.3				
163	178	185	257		2.5	2.5	11.8				
163	178	197	257		2.5	2.5	11.6				
163	178	185	257		2.5	2.5	11.7				
163	178	185	247		2.5	2.5	11.6				
163	173	257	257		2.5	2.5	18.4				
163	177	197	257		2.5	2.5	18.1				
167	180	185	260.5		2	2	23.6				
167	180	185	260.5		2	2	23.6				
166	272	304		282	3	3	26.5				
166	272	304		282	3	3	24.8				
166	189	196	304		3	3	26.6				
166	189	213	304		3	3	26.9				
166	189	213	304		3	3	27.4				
166	189	196	304		3	3	26.2				
166	189	196	304		3	3	26.2				
166	189	213	304		3	3	26.2				
166	189	196	304		3	3	26.7				
166	189	196	304		3	3	29.5				
166	189	196	304		3	3	43.1				
166	213	304		284	3	3	43.6				
166	186	196	304		3	3	41.5	HJ2330	2.8	15 33.67 3.7	
166	186	196	304		3	3	44.9	HJ2330	2.8	15 33.67 3.7	
166	189	196	304		3	3	44.9	HJ2330E2.64		15 31.19 4	
166	186	213	304		3	3	42.4	HJ2330	2.8	15 33.67 3.7	
166	186	213	304		3	3	42.7	HJ2330	2.8	15 33.67 3.7	
166	186	213	304		3	3	42.7	HJ2330	2.8	15 33.67 3.7	
166	186	213	304		3	3	43.2	HJ2330	2.8	15 33.67 3.7	
166	186	304		284	3	3	42.8				
166	189	196	304		3	3	42.6				
166	189	213	304		3	3	49.9				
166	189	213	304		3	3	49.9				

# Single-row Cylindrical Roller Bearing

d 158.75~160 mm



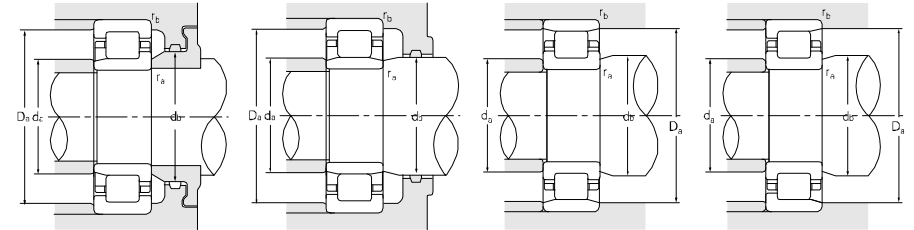
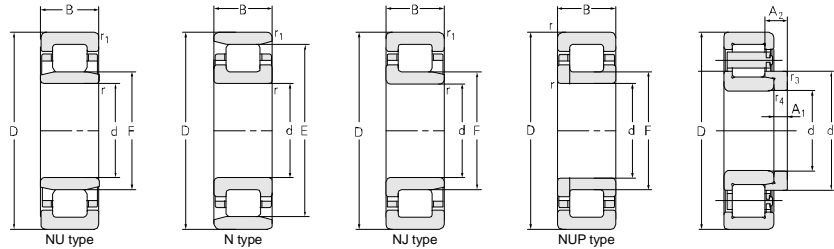
Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm							kN				r/min
<b>158</b>	290	110	3	3	193		935	1130	1800	2200	<b>NJ2232WBK3</b> <b>NJ2232WBK2</b> <b>N231.775Q4/W33</b>
<b>158.5</b>	290	110	3	3	193		935	1130	1800	2200	
<b>158.75</b>	231.775	161.925	2.1	2.1	176.5		1020	2390	2400	3000	
<b>159</b>	290	85	3	3	193		935	1130	2400	3000	<b>NJ2232WBK1</b> <b>NJ2232WBK1</b>
	290	110	3	3	193		935	1130	2400	3000	
<b>160</b>	220	36	2	2	173		255	435	2500	3200	<b>NJ2932M</b> <b>N032X3M</b> <b>N032M</b> <b>N1032M</b> <b>NJ1032M</b> <b>NU1032M</b> <b>NU1032Q1</b> <b>N232M</b> <b>NU232M</b> <b>NJ232M</b> <b>NUP232M</b> <b>N232E</b> <b>NU232E</b> <b>NU232EM/W124</b> <b>NU232EM/P59V2</b> <b>NU232EM/C91</b> <b>NU232EM/YA8</b> <b>NU232EMA</b> <b>NU232EQ1</b> <b>NJ232E</b> <b>NUP232E</b> <b>NU232EM-DT</b> <b>NU232EM/P4YA8</b> <b>NU2232</b> <b>NU2232EM</b> <b>NU2232EM/YA8</b> <b>NJ2232E</b> <b>NJ2232M</b> <b>NJ2232WB11Q1/YB2</b> <b>NJ2232WB1Q1/YB2</b> <b>NU2232EMA/YA8-1</b>
	230	22	1.5	1.5		209	160	240	2900	3500	
	240	25	1.5	1.5		216	193	300	2800	3400	
	240	38	2.1	2.1		220	260	365	2400	3000	
	240	38	2.1	1.5	180		259	380	2400	3000	
	240	38	2.1	2.1	180		259	380	2400	3000	
	240	38	2.1	2.1	180		259	380	2400	3000	
	290	48	3	3		257	495	655	1800	2200	
	290	48	3	3	193		495	655	1800	2200	
	290	48	3	3	193		495	655	1800	2200	
	290	48	3	3	193		495	655	1800	2200	
	290	48	3	3		259	517	695	1800	2200	
	290	48	3	3	195		517	695	1800	2200	
	290	48	3	3	195		517	695	1800	2200	
	290	48	3	3	195		517	695	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		495	665	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	48	3	3	195		470	615	1800	2200	
	290	48	3	3	195		515	695	1800	2200	
	290	80	3	3	193		688	1000	1800	2200	
	290	80	3	3	193		810	1190	1800	2200	
	290	80	3	3	193		810	1190	1800	2200	
	290	80	3	3	193		809	1190	1800	2200	
	290	80	3	3	195		700	1050	1800	2200	
	290	80	3	3	193		1030	1130	1800	2200	
	290	80	3	3	193		1030	1130	1800	2200	
	290	80	3	3	193		810	1190	1800	2200	

Abutment and fillet dimensions						Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>				r <sub>bmax</sub>	A1	A2
mm							kg	kg	mm		
173	188	208	277		2.5	2.5	26				
173	188	208	277		2.5	2.5	26				
167	172	177	220		2	2	23.9				
173	188	208	277		2.5	2.5	24.4				
173	188	208	277		2.5	2.5	26				
169	171	181	211		1.5	1.5	4.17				
168	205		220	210	1.5	1.5	3.37				
168	213		229	220	1.5	1.5	4.47				
168	217		232	223	2	2	5.96				
168	177	191	229		2	1.5	6.13				
168	177	183	229		2	2	5.96				
168	177	183	229		2	2	5.86				
173	255		277	263	2.5	2.5	14.3				
173	191	198	277		2.5	2.5	14.4	HJ232	1.4	12 19.68 3	
173	191	210	277		2.5	2.5	14.2	HJ232	1.4	12 19.68 3	
173		210	277		2.5	2.5	14.6				
173	255		277	263	2.5	2.5	13.9				
173	191	198	277		2.5	2.5	14.0				
173	191	198	277		2.5	2.5	14.3				
173	191	198	277		2.5	2.5	14.3				
173	191	198	277		2.5	2.5	14.3				
173	191	198	277		2.5	2.5	13.8				
173	191	198	277		2.5	2.5	14.3				
173	191	198	277		2.5	2.5	14.3				
173	191	210	277		2.5	2.5	14.3				
173	191	210	277		2.5	2.5	14.5				
173	191	198	277		2.5	2.5	14.0				
173	191	198	277		2.5	2.5	13.8				
173	189	196	277		2.5	2.5	23.3				
173	189	196	277		2.5	2.5	24.2				
173	189	196	277		2.5	2.5	23.6				
173	188	208	277		2.5	2.5	24.7				
173	189	196	277		2.5	2.5	23.9				
173	188	208	277		2.5	2.5	24.2				
173	188	208	277		2.5	2.5	26				
173	189	196	277		2.5	2.5	23.1				

# Single-row Cylindrical Roller Bearing



d 160~170 mm



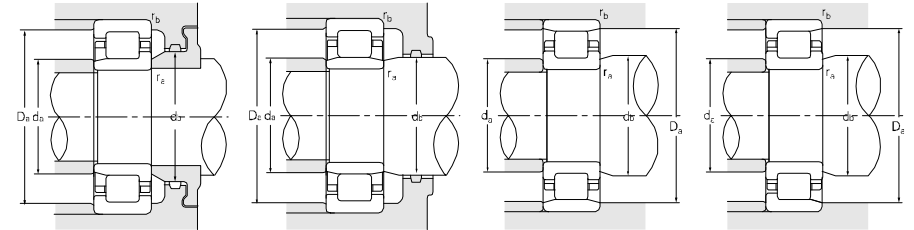
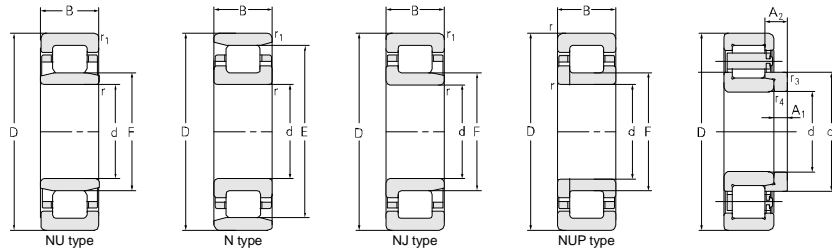
Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>Or</sub>	Grease		Oil
mm						kN		r/min			
<b>160</b>	290	80	3	3		261	810	1190	1800	2200	<b>N2232ENM</b>
	290	97.5	3	3	193		1030	1130	1800	2200	<b>NU2232WBQ1/YB2</b>
	290	97.5	3	3	193		935	1130	1800	2200	<b>NJ2232WBY</b>
	290	110	3	3	193		935	1130	1800	2200	<b>NJ2232WB</b>
	320	108	4	4	198		1070	1490	1500	1800	<b>N632M</b>
	340	68	4	4		292	750	970	1500	1800	<b>N332M</b>
	340	68	4	4	208		750	970	1500	1800	<b>NU332M</b>
	340	68	4	4	208		750	970	1500	1800	<b>NU332M/YA8</b>
	340	68	4	4	208		750	970	1500	1800	<b>NJ332M</b>
	340	68	4	4	204		858	1050	1500	1800	<b>NU332EQ1/HA</b>
	340	68	4	4	204		919	1150	1500	1800	<b>NU332EQ1</b>
	340	68	4	4	208		755	970	1500	1800	<b>NU332M-DT</b>
	340	68	4	4	204		870	1080	1500	1800	<b>FL-NU332EMA/C3</b>
	340	114	4	4		292	1120	1610	1350	1700	<b>N2332M</b>
	340	114	4	4	204		1260	1730	1350	1700	<b>NU2332EM/C9</b>
	340	114	4	4	204		1120	1730	1350	1700	<b>NU2332EMA</b>
	340	114	4	4	204		1310	1820	1350	1700	<b>NU2332E/YA5</b>
	340	114	4	4	204		1120	1610	1350	1700	<b>NU2332M</b>
	340	114	4	4	208		1120	1610	1350	1700	<b>NJ2332M</b>
	340	114	4	4	204		1120	1610	1350	1700	<b>NUP2332M</b>
<b>170</b>	230	28	2	1.1		216	193	310	2400	2900	<b>N1934M</b>
	260	42	2.1	2.1		237	299	400	2200	2800	<b>N1034M</b>
	260	42	2.1	2.1	193		299	440	2200	2800	<b>NU1034M</b>
	260	42	2.1	2.1	193		299	440	2200	2800	<b>NJ1034M</b>
	265	42	2.1	2.1		237	330	500	580	1100	<b>N1034X1M</b>
	310	52	4	4		272	500	780	1800	2200	<b>N234M</b>
	310	52	4	4	208		550	780	1800	2200	<b>NU234M</b>
	310	52	4	4	208		550	780	1800	2200	<b>NU234M/YA8</b>
	310	52	4	4	208		550	780	1800	2200	<b>NU234Q1</b>
	310	52	4	4	208		550	780	1800	2200	<b>NJ234M</b>
	310	52	4	4	207		640	870	1800	2200	<b>NU234EM</b>
	310	52	4	4	207		640	870	1800	2200	<b>NU234EM/P59V2</b>
	310	52	4	4	207		640	870	1800	2200	<b>NU234EM-DT</b>
	310	52	4	4	207		640	870	1800	2200	<b>FL-NU234EM</b>

Abutment and fillet dimensions							Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>	r <sub>bmax</sub>				A1	A2	r <sub>3,4</sub>
mm							kg	kg	mm			
173	198		277		2.5	2.5	23.5					
173	189	196	277		2.5	2.5	24.8					
173	188	208	277		2.5	2.5	25.8					
173	188	208	277		2.5	2.5	26					
176	188	208	304		3	3	40.9					
176	288		324	296	3	3	30.8					
176	204	211	324		3	3	30.9					
176	204	211	324		3	3	30.9					
176	204	225	324		3	3	31.5					
176	200	207	324		3	3	31.3					
176	200	207	324		3	3	27.8					
176	204	211	324		3	3	30.6					
176	200	207	324		3	3	31.4					
176	201	209	324		3	3	51.6					
176	201	209	324		3	3	52.4					
176	201	209	324		3	3	53.9					
176	201	209	324		3	3	50.7					
176	201	209	324		3	3	54.4	HJ2332	3.21	15	36.67 4	
176	215	194	324		3	3	54.3	HJ2332	3.21	15	36.67 4	
176	201	209	324		3	3	56.5					
180		213	222	219	1.5	1	3.64					
181	233		249	241	2	2	8.02					
181	190	196	249		2	2	8.23					
181	190	205	249		2	2	8.47					
186	234		254	241	2	2	7.97					
186	266		294	278	3	3	18.2					
186	203	210	294		3	3	17.9					
186	203	210	294		3	3	17.4					
186	203	210	294		3	3	18.1					
186	203	224	294		3	3	19.2					
186	203	210	294		3	3	18.4					
186	203	210	294		3	3	18.4					
186	203	210	294		3	3	18					
186	203	210	294		3	3	18.4					

# Single-row Cylindrical Roller Bearing



d 170~180 mm

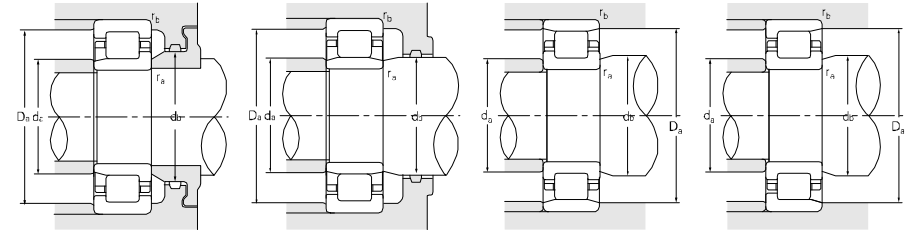
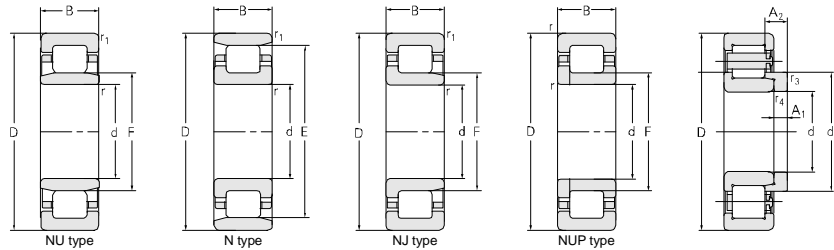


Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm						kN		r/min			
<b>170</b>	310	86	4	4	207		644	870	1800	2200	<b>NU234EWBM</b>
	310	86	4	4	205		1000	1480	1800	2200	<b>NU2234EM</b>
	310	86	4	4	208		875	1400	1800	2200	<b>NU2234M</b>
	310	86	4	4	205		1000	1480	1800	2300	<b>NJ2234EQ1</b>
	310	86	4	4	205		1000	1480	1800	2300	<b>NJ2234EM</b>
	310	86	4	4	205		1000	1480	1800	2300	<b>NJ2234EQ1/YA1</b>
	310	108	4	4	198		1070	1490	1500	1800	<b>NU634M</b>
	340	114	4	4		292	1120	1610	1500	1800	<b>N2334M</b>
	340	114	4	4	208		1120	1610	1500	1800	<b>NU2334M</b>
	360	72	4	4		310	815	1040	1400	1700	<b>N334M</b>
	360	72	4	4	220		810	1040	1400	1700	<b>NU334M</b>
	360	72	4	4	220		810	1040	1400	1700	<b>NJ334M</b>
	360	120	4	4	220		1270	1850	1400	1700	<b>NJ2334M</b>
	360	120	4	4	220		1270	1850	1400	1700	<b>NU2334M</b>
	360	120	4	4	220		1270	1850	1400	1700	<b>NU2334MA</b>
	360	120	4	4	220		1270	1850	1400	1700	<b>NU2334M/C9</b>
<b>180</b>	250	33	2	1.1		233	237	380	2200	2800	<b>NF1936M</b>
	280	31	2	2		250	270	420	2000	2400	<b>N036M</b>
	280	31	2	2		250	270	420	2000	2400	<b>N036L</b>
	280	31	2	2		260	330	472	2000	2400	<b>N036EM</b>
	280	33	2	2		260	341	540	1900	2200	<b>N036X2</b>
	280	46	2.1	2.1		255	380	565	2000	2600	<b>N1036M</b>
	280	50	2.1	2.1		255	420	640	2000	2600	<b>NF1036X2M</b>
	280	46	2.1	2.1	205		418	565	2000	2600	<b>NU1036M</b>
	280	46	2.1	2.1	205		380	565	2000	2600	<b>NJ1036M</b>
	320	52	4	4		282	555	785	1700	2000	<b>N236M</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236M</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236M/YA8</b>
	320	52	4	4	217		615	830	1700	2000	<b>NU236EM</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236M-DT</b>
	320	52	4	4	218		555	785	1700	2000	<b>NJ236M</b>
	320	52	4	4	218		555	785	1700	2000	<b>NUP236M</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236M-DT/YB2</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236L3-DT</b>
	320	52	4	4	218		555	785	1700	2000	<b>NU236L3-DT/YB2</b>

Abutment and fillet dimensions						Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>				r <sub>bmax</sub>	A1	A2
mm						kg	kg	mm			
186	203	210	294		3	3	21.4				
186	201	208	294		3	3	29.0				
187	203	211	293		3	3	30.5				
187		212	293		3	3	29.5				
187		212	293		3	3	29.5				
187		212	293		3	3	29.5				
176	195	201	304		3	3	40.9				
176	288		324	295	3	3	51.6				
176	200	211	324		3	3	54.4				
186	307		344	315	3	3	37.3				
186	214	223	344		3	3	37.7				
186	214	243	344		3	3	38.4				
186	212	240	344		3	3	62.5				
186	212	223	344		3	3	61.1				
186	212	223	344		3	3	61.5				
186	212	223	344		3	3	61.3				
190			240	236	1.5	1.5	4.96				
191	246		269	254	2	2	8.59				
191	246		269	254	2	2	7.08				
191	246		269	254	2	2	7.15				
191	256		269	264	2	2	8.44				
191	221		265	260	2	2	10.3				
191	221		265	260	2	2	11.9				
191	202	208	269		2	2	10.4				
191	202	208	269		2	2	10.7				
196	278		304	286	3	3	19.7				
196	213	220	304		3	3	19.2				
196	213	220	304		3	3	19.4				
196	202	208	304		3	3	18.7				
196	213	220	304		3	3	19.4				
196	213	234	304		3	3	19.3				
196		234	304		3	3	20.5				
196	213	220	304		3	3	19.4				
196	213	220	304		3	3	18.6				
196	213	220	304		3	3	18.6				

# Single-row Cylindrical Roller Bearing

d 180~190 mm

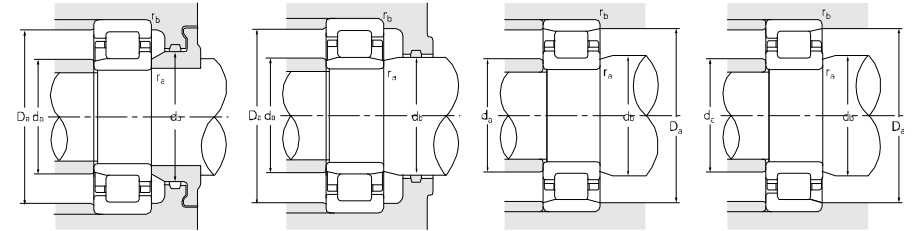
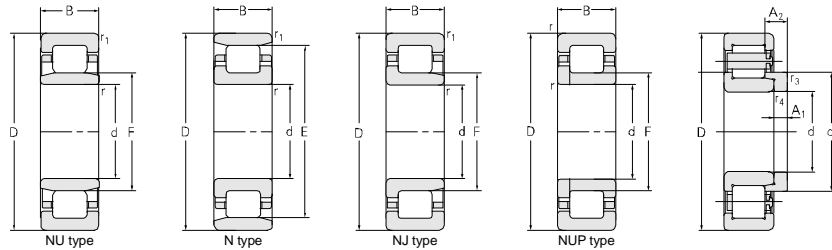


Principal dimensions						Basic load ratings		Limit speed ratings		Designations		
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil	
mm						kN		r/min				
<b>180</b>	320	86	4	4	215		1050	1580	1700	2000	<b>NU2236M</b>	
	320	86	4	4	215		1100	1580	1700	2000	<b>NU2236EM</b>	
	320	86	4	4	215		1050	1580	1700	2000	<b>NJ2236M</b>	
	320	86	4	4	215		1100	1580	1700	2000	<b>NJ2236EM</b>	
	320	86	4	4	215		1100	1580	1700	2000	<b>NJ2236EQ1</b>	
	320	86	4	4	215		1050	1580	1700	2000	<b>NUP2236M</b>	
	320	112	4	4	218		1120	1950	1700	2000	<b>NU3236M/C3</b>	
	320	112	4	4	218		1120	1950	1700	2000	<b>NU3236M/HC</b>	
	380	75	4	4		330	990	1260	1500	1800	1800	<b>N336M</b>
	380	75	4	4	230		990	1260	1500	1800	1800	<b>NU336M</b>
	380	75	4	4	230		990	1260	1500	1800	1800	<b>NJ336M</b>
	380	75	4	4	231		1170	1360	1500	1800	1800	<b>NJ336EM</b>
	380	75	4	4	231		1170	1360	1500	1800	1800	<b>NU336EM</b>
	380	75	4	4	231		1060	1360	1500	1800	1800	<b>NU336EMA</b>
	380	126	4	4	232		1360	1850	1300	1600	1600	<b>NJ2336M</b>
	380	126	4	4	232		1360	1850	1300	1600	1600	<b>NU2336M</b>
<b>190</b>	260	42	2	1.1	208		347	685	2200	2800	<b>NU2938Q1</b>	
	260	42	2	2	208		315	610	2200	2800	<b>NJ2938</b>	
	290	46	2.1	2.1	215		413	640	2000	2600	<b>NU1038M</b>	
	290	46	2.1	2.1	215		435	600	2000	2600	<b>NJ1038Q1/HAP63</b>	
	340	55	4	4	231		710	980	1600	1900	<b>NU238EM/C9</b>	
	340	55	4	4	231		620	885	1600	1900	<b>NU238M</b>	
	340	55	4	4	231		620	885	1600	1900	<b>NJ238M</b>	
	340	55	4	4	231		620	885	1600	1900	<b>NUP238M</b>	
	340	55	4	4		306	710	980	1600	1900	<b>N238EM</b>	
	340	55	4	4	230		710	980	1600	1900	<b>NU238EM-DT</b>	
	340	92	4	4	228		1140	1750	1600	1900	<b>NU2238M</b>	
	340	92	4	4	228		1210	1660	1600	1900	<b>NJ2238EM</b>	
	340	120	4	4	231		1320	2340	1600	1900	<b>NU3238M/C3</b>	
	400	78	5	5	245		1040	1370	1200	1500	1500	<b>NJ338M</b>
	400	78	5	5	245		1040	1370	1200	1500	1500	<b>NU338M</b>
	400	78	5	5		345	1040	1730	1200	1500	1500	<b>N338M</b>
400	132	5	5	240		1870	2450	1200	1500	1500	<b>NU2338EMA</b>	
400	132	5	5	245		1560	2300	1200	1500	1500	<b>NU2338M</b>	

Abutment and fillet dimensions						Weight	Model	Weight	Separate thrust collar			
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>				r <sub>bmax</sub>	A1	A2	r <sub>3, r4</sub>
mm						kg	kg	mm				
196	211	218	304		3	3	31.4					
196	211	218	304		3	3	30.3	HJ2236E1.94	12	23.67	4	
196	211	232	304		3	3	31.9					
196	211	232	304		3	3	31.0	HJ2236E1.94	12	23.67	4	
196	211	232	304		3	3	31.7					
196	211	232	304		3	3	32.1					
196	211	218	304		3	3	41.6					
196	211	218	304		3	3	41.6					
196	325	364		335	3	3	39.6					
196	226	236	364		3	3	42.8	HJ336	3.1	17	29.16	4
196	226	236	364		3	3	43.6	HJ336	3.1	17	29.16	4
196	226	254	364		3	3	42.7					
196	226	236	364		3	3	42.1					
196	226	236	364		3	3	43.3					
196	227	255	364		3	3	72.0					
196	227	236	364		3	3	69.5					
196	206	210	252		1.5	1	6.98					
196	206	210	252		1.5	1	7.24					
201	212	218	279		2	2	10.9					
201	212	218	279		2	2	11.2					
206	226	234	324		3	3	22.8					
206	226	234	324		3	3	21.6	HJ238	2.04	13	23.13	4
206	226	248	324		3	3	22.0	HJ238	2.04	13	23.13	4
206	226	248	324		3	3	22.3					
206	236	324			3	3	22.6					
206	226	234	324		3	3	22.5					
206	223	232	324		3	3	38.6					
206	232	218	324		3	3	39.6					
206	223	232	324		3	3	51.2					
206	240	266	380		4	4	49.4	HJ338	4.3	18	31.65	5
210	240	249	380		4	4	48.5	HJ338	4.3	18	31.65	5
210	340	380	350		4	4	50.2					
210	235	249	380		4	4	82.8					
210	230	380			4	4	82.9					

# Single-row Cylindrical Roller Bearing

d 190.5-220 mm



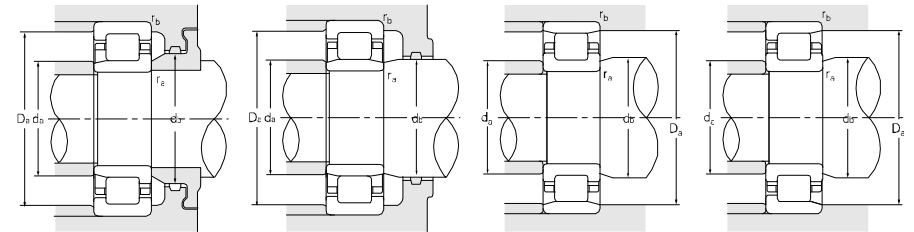
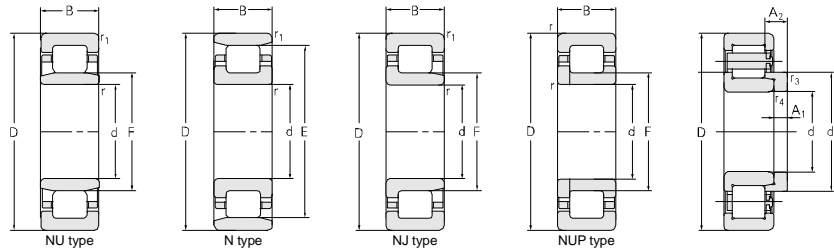
Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm						kN		r/min			
<b>190.5</b>	266.7	103.188	2	1.1	2.8		715	1480	1500	1800	<b>NU6/190.5/W33X</b>
<b>200</b>	310	34	2	2		277	336	545	2200	2800	<b>N040M</b>
	310	51	2.1	2.1	227		468	705	1900	2400	<b>NU1040M</b>
	310	51	2.1	2.1	227		468	705	1900	2400	<b>NJ1040M</b>
	310	100	2.5	2.5	275.5	234.5	930	2110	1900	2400	<b>NAOL4040X2</b>
	320	48	2.1	2.1		283	473	705	1900	2400	<b>N640M</b>
	320	88.9	3	3	232.689		776	1350	1700	2000	<b>NU3040X3M/C3</b>
	320	88.9	3	3	232.689		776	1350	1700	2000	<b>NU3040X3M/C4-NJB</b>
	360	58	4	4		316	690	995	1500	1800	<b>N240M</b>
	360	58	4	4	244		688	995	1500	1800	<b>NU240M</b>
	360	58	4	4	244		780	1090	1500	1800	<b>NU240EMA</b>
	360	58	4	4	244		625	995	1500	1800	<b>NJ240M</b>
	360	98	4	4	244		970	1550	1500	1800	<b>NJ2240M</b>
	360	98	4	4	244		996	1600	1500	1800	<b>NUP2240M</b>
	360	98	4	4		325	1240	1900	1500	1800	<b>N2240EM</b>
	360	98	4	4	241		1230	1980	1500	1800	<b>NU2240EM</b>
	360	98	4	4	241		1230	1900	1500	1800	<b>NU2240EM/C9W33A</b>
	360	98	4	4		325	1240	1900	1500	1800	<b>N2240EM/YA1</b>
	360	98	4	4	241		1240	1900	1500	1800	<b>FL-NJ2240EMA/P6</b>
	360	115	4	4	244		957	1520	1900	2400	<b>NU1240X2WBM/HG2</b>
	360	120.65	4	4	244		1280	2190	1900	2400	<b>NU5240XPC3</b>
	420	80	5	5	260		1090	1400	1300	1600	<b>NU340M</b>
	420	138	5	5	260		1650	2510	1200	1500	<b>NJ2340M</b>
	420	138	5	5		364	1650	2510	1200	1500	<b>N2340M</b>
	420	138	5	5	260		1650	2510	1200	1500	<b>NU2340MA</b>
	420	138	5	5	253		2040	2880	1200	1500	<b>NU2340EM/P5YA4-FYT</b>
	420	138	5	5	256		1970	2450	1200	1500	<b>NJ2340M/YA4</b>
	420	165	5	5	260		2150	3540	1200	1500	<b>NU3340M</b>
	420	165	5	5	260		2150	3540	1200	1500	<b>NUP3340M</b>
	420	165	5	5	260		2310	3400	1200	1500	<b>NU3340M/HCW20T</b>
<b>203.23</b>	310	82	3	3	229.006		880	1410	1000	1200	<b>NU30/203X4Q1/HA</b>
<b>220</b>	300	48	2.1	1.5	240		407	755	1900	2400	<b>NU2944Q1</b>

Abutment and fillet dimensions						Weight	Model	Weight	Separate thrust collar		
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>				r <sub>bmax</sub>	A1	A2
mm						kg	kg	mm			
197		200	257		2	1	18				
211	274		299	280	2	2	10.1				
211	225	233	299		2	2	14.3	HJ1040	1.70	13 24.13 2.1	
211	225	242	299		2	2	14.7	HJ1040	1.70	13 24.13 2.1	
211	225	233	299		2	2	30.2				
211	280		299	286	2	2	14.7				
211	225	235	309		3	3	28.7				
211	225	235	309		3	3	28.7				
216	310		344	322	3	3	26.8				
216	239	247	344		3	3	26.5				
216	239	247	344		3	3	27.5	HJ240E	2.72	14 23 4	
216	239	262	344		3	3	27.1				
216	236	260	344		3	3	45.5				
216		260	344		3	3	46.3				
216	320		344	330	3	3	44.9				
216	236	245	344		3	3	42.2				
216	236	245	344		3	3	42.0				
216	320		344	330	3	3	44.9				
216	236	230	344		3	3	46.7				
211	225	233	299		2	2	42.9				
211	225	233	299		2	2	57.6				
220	253	264	400		4	4	56.7	HJ340	5.2	18 32.63 5	
220	241	251	400		4	4	99	HJ2340	6.13	18 41.6 5	
220	360		400	368	4	4	94.5				
220		243	400		4	4	95.6	HJ2340	6.13	18 41.6 5	
220		240	400		4	4	96.7				
220	241	251	400		4	4	98.4	HJ2340	6.13	18 41.6 5	
220	253	264	400		4	4	118				
220		282	400		4	4	121				
220	253	264	400		4	4	115				
220	253	230	290		2	2	23.9				
229	237	243	289		2	1	10.5				

# Single-row Cylindrical Roller Bearing



d 220~240 mm



Principal dimensions						Basic load ratings		Limit speed ratings		Designations	
d	D	B	r <sub>1smin</sub>	r <sub>smin</sub>	F	E	C <sub>r</sub>	C <sub>0r</sub>	Grease		Oil
mm						kN		r/min			
<b>220</b>	300	48	2.1	2.1	240		407	750	1900	2400	<b>NJ2944M</b>
	340	56	3	3	250		517	775	1800	2200	<b>NU1044Q1</b>
	340	56	3	3	250		534	810	1800	2200	<b>NJ1044M</b>
	340	56	3	3	250		534	810	1800	2200	<b>NU1044M</b>
	340	56	3	3		310	530	810	1800	2200	<b>NFP1044M</b>
	340	90	3	3	251.409		1060	1820	1800	2200	<b>NU3044Q1/HA</b>
	350	98.4	3	3	253		1280	2090	1800	2200	<b>NU3044X3M/C9</b>
	350	90	3	3	253		965	1830	1800	2200	<b>NU3044M/HG2W33A</b>
	350	98.4	3	3	253		1280	2090	1800	2200	<b>NU3044X3M/C9-NJB</b>
	350	98.4	3	3	253		1280	2090	1800	2200	<b>NU3044X3M/C91YA6</b>
	350	98.4	3	5	253		1280	2090	1800	2200	<b>NU3044X3M/C92YA6-LS</b>
	400	65	4	4		350	836	1220	1500	1800	<b>N244M</b>
	400	65	4	4	270		835	1220	1500	1800	<b>NJ244M</b>
	400	65	4	4	270		835	1440	1990	1800	<b>NU244M</b>
	400	65	4	4	270		835	1220	1500	1800	<b>NUP244M</b>
	400	108	4	4	270		1220	1990	1300	1600	<b>NU2244M</b>
	400	144	4	4	270		1950	3350	1500	1800	<b>NB3244F1</b>
	400	108	4	4	270		1440	1990	1300	1600	<b>NJ2244M</b>
	400	108	4	4	270		1490	2280	1300	1600	<b>NU2244EM</b>
	400	108	4	4		350	1440	1990	1300	1600	<b>N2244M/YA1</b>
	400	108	4	4	265		1490	2280	1300	1600	<b>NU2244EM/HC</b>
	400	108	4	4	265		1490	2280	1300	1600	<b>NU2244EMA</b>
	400	108	4	4		350	1440	1990	1300	1600	<b>N2244M</b>
	460	88	5	5	284		1280	1730	1000	1300	<b>NU344M</b>
	460	88	5	5	282		1370	1840	1000	1300	<b>NJ344EM</b>
	460	145	5	5	284		2040	2780	1000	1300	<b>NU2344M/C3</b>
	460	145	5	5	284		2040	2780	1000	1300	<b>NU2344M</b>
	460	145	5	5	284		2170	3270	1000	1300	<b>NU2344M/C9</b>
	460	145	5	5	275		2310	3400	1000	1300	<b>NU2344E/YA5</b>
	460	145	5	5		407	2300	3360	1000	1300	<b>N2344EM</b>
	460	145	5	5	275		2230	3250	950	1100	<b>NU2344EMA</b>
<b>240</b>	320	38	2.5	1.8	260		308	540	1900	2400	<b>NU1948M</b>
	320	38	2.5	1.8	260		310	540	1900	2400	<b>NJ1948M</b>
	360	56	3	3	270		512	775	1700	2000	<b>NU1048M</b>

Abutment and fillet dimensions								Weight	Model	Weight	Separate thrust collar			
d <sub>amin</sub>	d <sub>amax</sub>	d <sub>bmin</sub>	D <sub>amax</sub>	D <sub>amin</sub>	r <sub>amax</sub>	r <sub>bmax</sub>					A1	A2	r <sub>3,4</sub>	
mm								kg	kg	mm				
229	237	243	289		2	2		10.8						
233	246	254	327		2.5	2.5		19.4						
233	246	265	327		2.5	2.5		19.6						
233	246	254	327		2.5	2.5		19.2						
233	246	254	327		2.5	2.5		20.2						
233	246	254	327		2.5	2.5		32						
233	248	257	332		2.5	2.5		38.1						
233	248	257	332		2.5	2.5		32.4						
233	248	257	332		2.5	2.5		38.1						
233	248	257	332		2.5	2.5		38						
233	248	257	332		2.5	2.5		38						
236	342	384		358	3	3		36.7						
236	263	290	384		3	3		35.4	HJ244	3.78	15	27.13	4	
236	263	276	384		3	3		35.0	HJ244	3.78	15	27.13	4	
236	263	276	384		3	3		38.8						
236	262	274	384		3	3		62.2						
236	263	276	384		3	3		77.3						
236	262	290	384		3	3		63.3						
237	255	264	383		3	3		62.8						
237	255	360	383		3	3		61.8						
237	255	264	383		3	3		62.8						
237	255	264	383		3	3		63.8						
237	255	360	383		3	3		61.8						
240	277	288	440		4	4		73.4	HJ344	6.7	20	35.62	5	
240	292	270	440		4	4		75.6						
240	276	288	440		4	4		125						
240	276	288	440		4	4		125						
240	276	288	440		4	4		114						
240	403	440		411	4	4		121						
240	403	440		411	4	4		114						
240	268	280	440		4	4		116						
249	257	263	308		2	1.5		8.50						
249	251	260	308		2	1.5		8.74						
253	266	274	347		2.5	2.5		20.5						