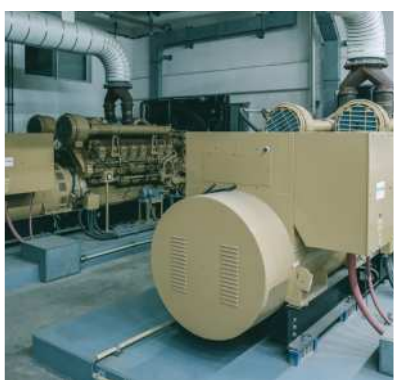
Looking to downsize but maintain performance?

SKF Explorer cylindrical roller bearings now including NU and NJ 10 series



Now in
SKF Explorer
performance class

In good company – NU and NJ 10 series joins the SKF Explorer cylindrical roller bearings range

The SKF Explorer cylindrical roller bearings range now includes the NU and NJ 10 series – designed and tested to provide reliability and increased service life even in the most demanding applications.

Special heat treatment

A unique heat treatment process is applied to all SKF Explorer bearings. This improves the microstructure of the steel and makes the bearings more durable and resistant to contamination.

Improved surface topography

The surface finishes of SKF Explorer cylindrical roller bearings are designed to extend the service life by reducing friction, which helps reduce heat generated in the bearing and improves wear resistance.

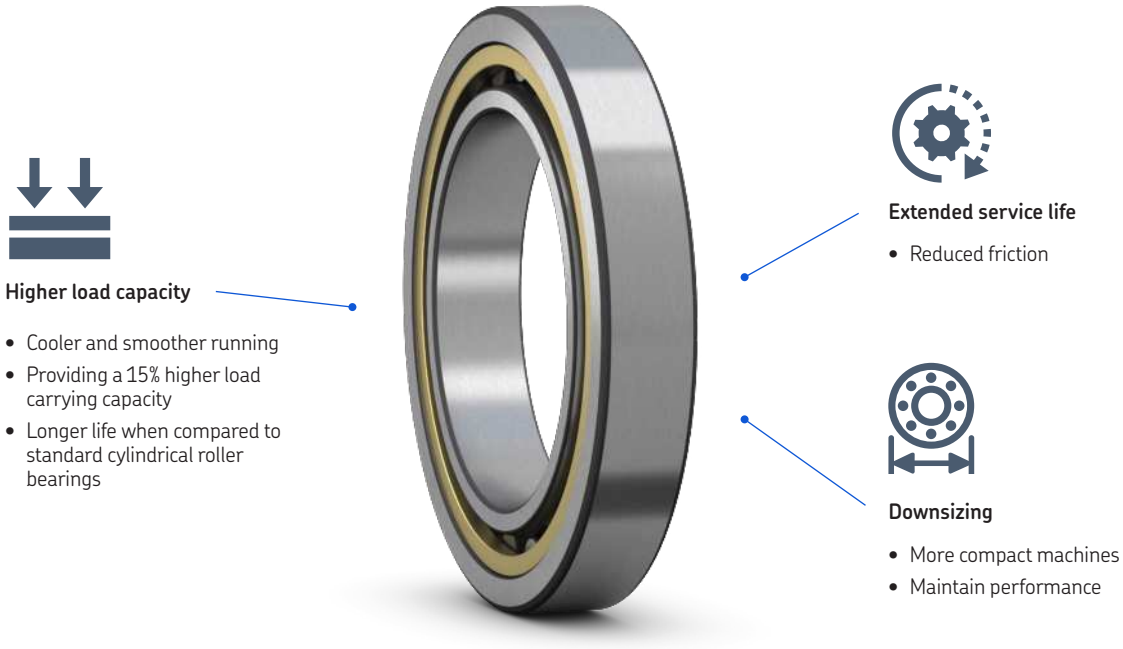
Reduced flange friction

SKF Explorer NJ series cylindrical roller bearings reduce flange friction which can accommodate heavier axial loads, reduce frictional moment, and reduce the risk of roller-flange smearing.

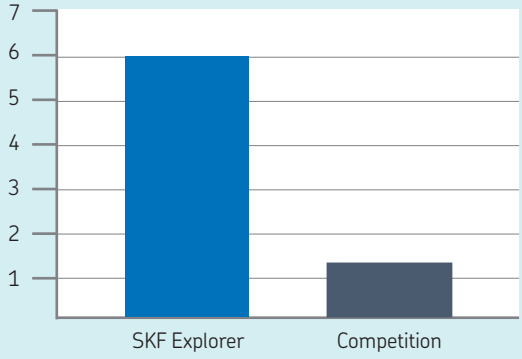
Superior by every measure

Compared to standard bearings in demanding applications, SKF Explorer cylindrical roller bearings rise above the rest. Benefits include:

- Longer service life
- Reduced friction
- Extended maintenance intervals
- Improved wear resistance
- Decreased energy consumption
- Lower cost of ownership
- Increased productivity



With the NU and NJ 10 series in SKF Explorer performance class, you can expect to see a noticeable difference in operation temperature, improved service life, reduced noise, better speed performance, less lubrication needs and possibilities for downsizing.



Compared to conventional bearings (of similar design and size) SKF Explorer cylindrical roller bearings 10 series can last up to 3 times longer.

UP TO
3 x
LONGER
SERVICE LIFE

Performance fine tuned for your applications

Specifically designed for applications that require extended service life, low friction, low noise and high speed and accuracy, the SKF Explorer cylindrical roller bearings NU and NJ 10 series run cooler and smoother and have a 15% higher load carrying capacity which results in longer life.
Common applications include:

Fluid machinery
- Screw compressors
- Hydraulic pumps
- Separators

Industrial gearboxes
- Geared motors

Industrial electrical
- Large electric motors
- Generators

Railways
- Traction motors
- Gearboxes

Here to help you perform

When you choose SKF Explorer cylindrical roller bearings, you can look forward to the technical quality and end-to-end support of an established industry leader. From global customer service to expert application support, count on us to help you perform as smoothly and efficiently as possible.

Running machines cooler and for longer

A customer needed bearings that could match the high acceleration and high speed requirements of separators.

By switching from conventional bearings to SKF Explorer NU 10 series cylindrical roller bearings, service life was improved. With smoother surface finishes and reduced waviness, the new bearings also offered lower friction. Thanks to the bearing change, the machine is now running cooler and longer.

Downsizing and reducing energy consumption

A customer wanted to build more compact compressor units but keep the same performance ratings as the existing units.

By switching from NU 2 to NU 10 series cylindrical roller bearings in SKF Explorer performance class, the customer was able to downsize without changing the ratings. Smaller, more compact units with lower weight helped to reduce the size of the equipment as well as energy consumption and costs.

Reducing the number of different spare parts

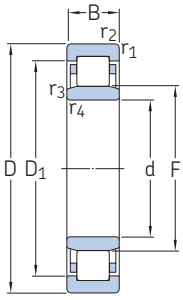
A wind energy customer wanted to use the bearing arrangement for the 4.x MW platform generator in their next, bigger platform – but those bearings did not meet the expected service life.

We therefore proposed an upgrade from conventional cylindrical roller bearings to SKF Explorer NU 10 series cylindrical roller bearings. With their 15% higher load rating capacity, we were able to meet the customer's service life requirements.

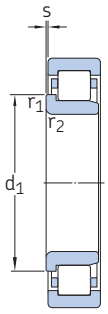
In addition, since the customer was now able to use the same bearing arrangement for both sizes of generators, they could avoid to have a different generator design/ configuration for the two turbines and the number of different spare parts.

SKF Explorer single row cylindrical roller bearings, NU and NJ series

d **25 - 300** mm



NU



NJ

Principal dimensions			Basic load ratings		Fatigue load limit	Speed ratings		Mass	Designations	
			dynamic	static		Reference speed	Limiting speed		Bearing with standard cage	Alternative cage [1]
d	D	B	C	C_0	P_u					
mm			kN		kN	r/min		kg	–	
35	62	14	35,8	38	4,55	13 000	13 000	0,16	▸ NU 1007 ECP	PH
40	68	15	25,1	26	3	12 000	18 000	0,23	▸ NU 1008 ML	–
45	75	16	52	52	6,3	11 000	11 000	0,25	▸ NU 1009 ECP	–
	75	16	52	52	6,3	11 000	11 000	0,26	▸ NJ 1009 ECP	PH
50	80	16	53	56	6,7	9 500	9 500	0,27	▸ NU 1010 ECP	–
55	90	18	65,5	69,5	8,3	8 500	8 500	0,39	▸ NU 1011 ECP	ML
	90	18	65,5	69,5	8,3	8 500	8 500	0,42	NJ 1011 ECP	ML
60	95	18	37,4	44	5,3	8 000	13 000	0,5	▸ NU 1012 ML	–
	95	18	58,3	73,5	8,8	6 700	8 000	0,4	NU 1012 ECP	
65	100	18	44	46,5	5,5	7 500	12 000	0,51	▸ NU 1013 ML	–
	100	18	72	81,5	9,8	7 500	7 500	0,45	▸ NU 1013 ECP	PH
70	110	20	64	67	8	7 000	11 000	0,7	▸ NU 1014 ML	–
	110	20	86,5	93	12	7 000	7 000	0,61	▸ NU 1014 ECP	–
75	115	20	67	71	8,5	6 700	10 000	0,75	▸ NU 1015 ML	M
80	125	22	73,5	78	9,8	6 300	6 300	0,88	▸ NU 1016	–
	125	22	112	127	16,3	6 000	9 500	1,05	NJ 1016 ECML	M
85	130	22	78	86,5	10,8	6 000	9 000	1,05	▸ NU 1017 ML	–
	130	22	78	86,5	10,8	6 000	9 000	1,1	NJ 1017 ML	–
	130	22	78	86,5	10,8	6 000	9 000	1,1	NUP 1017 ML	–
90	140	24	93	104	12,7	5 600	8 500	1,35	▸ NU 1018 ML	M
	140	24	93	104	12,7	5 600	8 500	1,4	NJ 1018 ML	M
95	145	24	96,5	110	13,2	5 300	8 000	1,45	▸ NU 1019 ML	–
100	150	24	100	114	13,7	5 000	7 500	1,45	▸ NU 1020 ML	M
105	160	26	116	137	16	4 800	7 500	1,9	▸ NU 1021 ML	–
110	170	28	146	166	19,3	4 500	7 000	2,3	▸ NU 1022 ML	M
120	180	28	153	183	20,8	4 000	6 300	2,55	▸ NU 1024 ML	M
130	200	33	186	224	25	3 800	5 600	3,85	▸ NU 1026 ML	M
	200	33	186	224	25	3 800	5 600	3,9	NJ 1026 ML	M

SKF Explorer bearing
▸ Popular item
[1] When ordering bearings with an alternative standard cage, the suffix designation of the standard cage needs to be replaced by the suffix of the alternative cage. For example NU .. ECP becomes NU .. ECML

Principal dimensions			Basic load ratings		Fatigue load limit	Speed ratings		Mass	Designations	
			dynamic	static		Reference speed	Limiting speed		Bearing with standard cage	Alternative cage [1]
d	D	B	C	C_0	P_u					
mm			kN		kN	r/min		kg	–	
140	210	33	204	255	28	3 600	5 300	4,05	▸ **NU 1028 ML**	M
150	225	35	228	290	31,5	3 200	5 000	4,9	▸ **NU 1030 ML**	M
160	240	38	265	325	35,5	3 000	4 800	6	▸ **NU 1032 ML**	M
170	260	42	320	400	41,5	2 800	4 300	8	▸ **NU 1034 ML**	M
	260	42	320	400	41,5	2 800	4 300	8,2	**NJ 1034 ML**	M
180	280	46	380	475	51	2 600	4 000	10,5	▸ **NU 1036 ML**	M
	280	46	380	475	51	2 600	4 000	10,5	**NJ 1036 ML**	M
190	290	46	400	500	53	2 600	3 800	11	▸ **NU 1038 ML**	M
	290	46	400	500	53	2 600	3 800	11	**NJ 1038 ML**	M
200	310	51	440	570	58,5	2 400	3 600	14	▸ **NU 1040 ML**	M
220	340	56	570	735	73,5	2 200	3 200	18,5	▸ **NU 1044 ML**	–
	340	56	570	735	73,5	2 200	3 200	18,5	**NJ 1044 ML**	M
240	360	56	600	800	78	2 000	3 000	19,5	▸ **NU 1048 ML**	M
260	400	65	720	965	96,5	1 800	2 800	29,5	▸ **NU 1052 ML**	M
	400	65	720	965	96,5	1 800	2 800	30	**NJ 1052 ML**	M
280	420	65	765	1 060	102	1 700	2 600	31	▸ **NU 1056 ML**	M
300	460	74	1 000	1 370	129	1 500	2 000	46	▸ **NU 1060 ML**	M
	460	74	1 000	1 370	129	1 500	2 000	46	**NJ 1060 ML**	–

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