



KINEX BEARINGS

Manufacturer of Premium Bearings and Open End Spinning Spares



MORE THAN 115 YEARS OF EXPERIENCE IN ENGINEERING AND BEARINGS PRODUCTION





Slovakia, Bytča (HQ)

Total land area: 86 336 m2 Production area: 41 659 m2 Estabilished from: 1906

Slovakia, Kysucké Nové Mesto

Total land area: 97 713 m2 Production area: 63 571 m2 Estabilished from: 1948



HISTORICAL MILESTONES

1906	> KINEX, a.s.
	foundation of the plant in Bytca, beginning of the
	engineering production "Povazsky zelezopriemysel"
1948	> KINEX- KLF, a.s.
	foundation of the plant in Kysucke Nove Mesto
1950	> Production of balls and ball bearings
	the first produced bearing in Slovakia was 6204
	type
1953	> Production of rollers and cylindrical roller bearings
	single-row cylindrical roller bearings
1959	> Production of railway bearings
	single-row cylindrical roller bearings for railway
	vehicles
1964	> Production of aerospace bearings
	for various aerospace industry applications
1968	> Production of textile industry bearings
	special double-row ball bearings
1978	> Production of water pump bearings
	special double-row bearings
1987	> Production of bottom bracket bearings
	special double-row bearings
2005	> KINEX BEARINGS, a.s.
	foundation of a trading company
2009	> New aerospace bearings production area
	realized in Bytca plant
2013	> KINEX Trading (Shanghai) Co., Ltd
	foundation of a subsidiary in China
2016	> Merger of companies
	KINEX BEARINGS, a.s., KINEX - KLF, a.s.
	and KINEX, a.s. merge into KINEX BEARINGS, a.s.
2016	> Production of engineering components
	foundation of Machinery division
2020	> CK Birla Group
	KINEX BEARINGS enters international industrial
	group

KINEX TEXTILE BEARINGS AND ROTOR SPINDLES

Wide assortment of KINEX rolling bearings include special rolling bearings for textile machinery. The beginning of special rolling bearings production for textile industry goes back to 1968. KINEX BEARINGS on the present belongs to leaders concerning deliveries of special bearings for textile machinery in Europe and other countries of the world. With historical brand KINEX, we have more than 100 years experiences in engineering segment.

The development of special bearings for textile industry hangs together with a solution of arrangements of the most important parts in the textile machines but also for measuring instruments. Special double row ball bearings for textile machines are designed far high rotational speed and relatively light load. They are known for their high dimensional accuracy and smoothed run warranting their high effectiveness. These bearings are supplying according to demand of the customers complemented with some other components, e. g. resilient mounting serials.

Application of bearings

Wide assortment of KINEX textile bearings and spindles are used:

- > used for open end spinning rotor application
- > in non spindle spinning machiness
- > by housing a bearing of spinning chamber and of a card hackling disk
- > press pulley bearings
- > in arrangements of textile spindles, in texturing machines



PRODUCTION TECHNOLOGY

SURFACE TREATMENT OF CUPS



Grinding and Superfinishing of Bearings

Grinding and superfinishing of bearings are critical precision processes that enhance the surface finish, dimensional accuracy, and overall performance of the components. These techniques ensure reduced friction, improved wear resistance, and extended operational life.

Cups Machining and Inspection Process

Kinex produces rotor cups for the textile segment customer which are made with high grade of raw material and machined in Kinex Slovakia with the most latest technology of multi-axis CNC machines.

Inspection of Bearings

Inspection of bearings ensures quality, reliability, and performance by identifying defects, measuring tolerances, and verifying compliance with specifications.





Quality Labs

Quality labs are specialized facilities equipped to conduct rigorous testing and analysis, ensuring products meet stringent standards and performance criteria.

Cups Coating Thickness and Diamond Matrix in Coating

All the Kinex cups are coated with Diamond or Diamond Nickle. Our cups has coating thickness of 25 µm to 35 µm depending on the type of cups and its application. These high wear resistance coating provide extended life to the cups in even the most harsh types of fibres & blends including recycled cotton, viscose, polyester, PET fibre etc.

Bearing run-in

Controlled process that ensures optimal performance by evenly distributing lubrication, reducing initial friction, and stabilizing operating conditions.







These cups are machined up to a tolerance of even 5 μ m and they are inspected in the most high-tech quality laboratory of Kinex which controls the dimensions, geometry and the surface parameters of the cups. The quality of these cups are suitable to provide longer life of the rotor cups. Kinex rotor cups are suitable to produce yarns from a wide range of fibres and can produce yarn from count Ne 2 to Ne 40.



Thickness of Coating in DN Coated Cups

These Diamond or Diamond Nickle coating provide the best price to life ratio to the users and so these are the most cost effective products for OE spinning. Our cups has extra smooth surface which results in minimum yarn breakage even at high speeds.

ROTOR CUPS NOMENCLATURE

TYPES OF GROOVE IN ROTOR CUPS

Cup Marking



> Suitable for BD 3XX, 4XX, BD 6/7/8, T8F 3XX, TQF 5XX, TQF K80, RIFA RSXX and all new gen machines

34

DN

Type of coating

D - diamond coated

E - elox / anodized

Germany

DN - diamond coated and nickelised

** all KINEX cups are coated in

Cup groove diameter in mm

Cup groove shape

т

- T = CO, CV and blends (universal type)
- Z = MMF and blends
- RooU = MMF, PES, BLENDS
- L = LI and blends, secondary fibres

> Suitable for RIETER BT 9XX, R3X and RIFA RSXX machines









Cups Internal Geometry T Cup Groove > universally applicable



> Our rotor cups are produced in various types of grooves based on customer's requirement and the raw material fibres used by them. Kinex produces grooves in various groove angles and end radius which help in smooth flow of the fibre and results in high CSP of yarn. Our most high demand types of cup grooves are T, Z, and U type. However we also offer special R, L and V type groove based on the demand from customers.

KINEX LINK APPLICATION





Z Cup Groove

> universally applicable very good spinning stability for bulky yarns clean cotton > tendency to moiré faults



U Cup Groove

- > upreferably Ne 10 and coarser
- > high yarn bulk
- > relatively irregular varn
- > low snarling tendency

- > KINEX Link enables the authentication of bearings made by KINEX BEARINGS for the textile industry. It is an easy to use application and offers great protection against counterfeit bearings.
- In addition, KINEX Link is able to track the bearing life cycle in a customer company. It can save the information about the assembly process (Machine ID, Rotor cup, etc.) and also cause of the disassembly (Re-lubrication, Lifespan end, etc.).
- At any point in time, the customer is able to get a report of a one specific bearing or an overall report for all bearings in the KINEX Link database assigned to the customer's account.

 \cdot Check the authenticity of the textile bearings using a QR code · Keep track of the bearings – assembly and disassembly process · Receive a specific bearing report or all bearings report in the KINEX Link

ROTORS FOR SAURER OE MACHINES

ROTORS FOR RIETER OE MACHINES



For: New Generation Machines

> For machine type: BD 3XX, BD 4XX, BD6, BD7 & BD8

For: New Generation Machines

> For machine type: BT 923, R 923, R35, R36 & R37 OE



Bearing	RPM min ⁻¹	Rotor Cup Type (without holes)	
	25 000 - 45 000	Z66DN	
73-1-22	40 000 - 60 000	Z54DN	
	40 000 - 60 000	T50DN	
	55 000 - 75 000	T 46DN	
73-1-31 / T004 / T088	55 000 - 75 000	T43 DN	
	60 000 - 80 000	T40DN	
	75 000 - 105 000	T34D	
T010 / T090	75 000 - 105 000	T34DN	
	75 000 - 105 000	R34DN	
T100	105 000 - 110 000	T34DN	

> KINEX BEARINGS also supply Rotor with special Titanium Cups for these machines.

> KINEX BEARINGS is also able to supply various types of rotor cups with the above mentioned bearings suitable for a wide range of rpm and yarn types. If you have some special request for some rotor cup, please inform us the type, diameter and surface treatment of it.



> Kinex Bearings could offer a wide range of rotor completes according to the customer's demand. If you have some special request for some rotor cup, please inform us the type, diameter and surface treatment of it.





Cup

Bearing	min ⁻¹	Rotor Cup Type (without holes)
73-1-52 / 73-1-50	40 000 - 60 000	C254 U-D / S254 U-D
	60 000 - 75 000	C341 U-D / S341 U-D / S341 T-D
	65 000 - 85 000	C338 U-D / S338 U-D
T013 / 72-11	75 000 - 95 000	C536 U-D / S536 U-D
1013772-11	80 000 - 105 000	S534 T-D
	80 000 - 105 000	C533 U-D / S533 U-D
	80 000 - 105 000	C533 Tr-D / S533 Tr-D

> KINEX BEARINGS also supply Rotor with special Titanium Cups for these machines.







RDM

ROTORS FOR TAITAN & RIFA OE MACHINES

ROTORS FOR OLD GENERATION OE MACHINES









Bearing	RPM min ⁻¹	Rotor Cup Type (without holes)	
73-1-22 / 73-1-31	25 000 - 45 000	Z66-DN/ T66-DN	
/3-1-22 / /3-1-31	40 000 - 60 000	Z54-DN/T54-DN/L54-DN	
	55 000 - 75 000	T46-DN	
77 1 71 (7004 (7005 (7000	55 000 - 75 000	T43-DN/Z43-DN	
73-1-31 / T004 / T086 / T088	60 000 - 80 000	T42-DN/ T42-DNTi	
	60 000 - 80 000	T40-DN/ T40-DNTi	
	75 000 - 105 000	T34-D/ T34-DTi	
T010 (T000	75 000 - 105 000	T34-DN/ T34-DNTi	
Т010 / Т090	75 000 - 105 000	R34-DN/R34-DNTi	
	75 000 - 105 000	T33-D/ T33-DTi	

> KINEX BEARINGS also supply Rotor with special Titanium Cups for these machines.

> Kinex Bearings could offer a wide range of rotor completes according to the customer's demand. If you have some special request for some rotor cup, please inform us the type, diameter and surface treatment of it.



	25 000 - 45 000
73-1-22	25 000 - 45 000
75-1-22	40 000 - 60 000
	40 000 - 60 000
73-1-31	55 000 - 75 000
75-1-51	60 000 - 80 000
72-6	55 000 - 75 000
12-0	70 000 - 90 000

Bearing

RPM

min⁻¹

> Kinex Bearings could offer a wide range of rotor completes according to the customer's demand. If you have some special request for some rotor cup, please inform us the type, diameter and surface treatment of it.



For: Old Generation Machines

> For machine type: BD 200 RCE / RN / SN / S BD SD / D1 / D2 BD A 10 / 20, BT 902 / 903

Note
*
*
*
*

* Also available in DN coating

ROTOR SPINDLES

Rotor Applications Up to 90.000 RPM

ROTOR SPINDLES

Rotor Applications Up to 105.000 RPM



> Type: 73-1-22



> Type: T 004



> Type: 72-6

12





Designation	øD	ød	L	L ₁	М	Operating speed	Limited speed **	Relubrication hole	Note
			mm			min ⁻¹	min ⁻¹		
73-1-22	22	10	112	56	18	55 000	60 000	Yes	×
T004	22	10	112	56	18	75 000	80 000	Yes	
72-6	22	8,9	112	61	13	85 000	90 000	Yes	*
73-1-31	22	10	22	22	18	75 000	80 000	Yes	
T086	22	8,9	22	22	18	75 000	80 000	Yes	***
т088	22	8,9	22	22	18	75 000	80 000	Yes	

* The deviations from the specification in the picture are noticed in the drawings

** If using any maxspeed limit for shortterm textile-technological test, it is necessaryto disscuss with the original parts supplier

*** T086 has 10 mm shaft on cups side and 8.9 mm shaft on cup side









> Type: T 010



> Type: T 013



Designation	øD	ød	L	L,	м	Ceramic Balls	Operating speed	Limited speed **	Relubrication hole	Note
			mm				min ⁻¹	min ⁻¹		
T010	22	8.9	112	61	13	Yes	100 000	105 000	Yes	*
T013	22	8.9	108	61	13	Yes	100 000	105 000	Yes	*
72-11	22	8.9	108	61	13	Yes	100 000	105 000	Yes	
т090	22	8.9	112	61	13	No	85 000	90 000	Yes	
FUYARA	22	8.9	112	61	13	Yes	100 000	105 000	Yes	***
T100	22	8.9	112	61	13	Yes	105 000	110 000	Yes	

* The deviations from the specification in the picture are noticed in the drawings

** If using any maxspeed limit for short term textile-technological test, it is necessary to disscuss with the original parts supplier

*** FUYARA Bearing has Single Hole Lubrication









OPENING ROLLER BEARINGS

PRESS PULLEY BEARINGS









Designation	øD	øD ₁	ød	L	L,	L ₂	М	Operating speed	Relubrication hole
				mm				min ⁻¹	
73-1-28	28	M24x1	10	50.5	35	12	15	15 000	No
73-1-49	28	M24x1	10	54.5	39	16	15	15 000	No

BELT TENSION PULLEY BEARINGS



* The deviations from the specification in the picture are noticed in the drawings

> KINEX BEARINGS is also able to supply various types of press pulley with bearings for OE machinery

> Type: 76-3, 76-3KK



> Type: 76-3-7, 76-3-7KK





> Type: T 763, 76-3-16, 76-3-17



Designation	øD	ød	L	L,	М	d,	Operating speed	Relubrication hole	Note
			m	m			min ⁻¹		
76-3	30	16	73	39	16.9	-	10 000	No	
76-3KK	30	16	73	39	16.9	-	10 000	No	metal seal
76-3-7	30	16	73	39	16.9	-	10 000	Yes	
76-3-7KK	30	16	73	39	16.9	-	10 000	Yes	metal seal
Т763	30	16	73	39	16.9	-	10 000	No	metal seal
76-3-16	30	16	80	39	24	-	10 000	Yes	metal seal
76-3-17	30	16	80	39	24	-	10 000	Yes	metal seal

> KINEX BEARINGS is also able to supply premium quality opening rollers in various types of wires like OK40-DN, OK61-DN, OS21-DN suitable as per customer needs in heads and completes









RESILIENT MOUNTING SERIERS

RESILIENT MOUNTING SERIERS



> Type: 83-18-6, 83-18-10



For Machine Type:	For	Machine	Туре:
-------------------	-----	---------	-------

BT 923, R 923, R35, R36 & R37

For Machine Type:

BD 3XX, 4XX series, BD 7 BT 923, R 923, R35, R36, R37 Taitan TQF 3XX, 5XX, K80 series RIFA RS 30C, 30D, RS 51 series Jingwei 15XX, 1618 series

> Type: 83-18-4



> Type: 83-18-100



Designation	øD	ød	L	Application for the bearings with the limited speed	Note
		mm		min ⁻¹	
83-18-4	38	22	70	90 000	*
83-18-100	38	22	69	105 000	*

* The deviations from the specification in the picture are noticed in the drawings



Designation	øD	ød	L	Application for the bearings with the limited speed	Note
		mm		min ⁻¹	
83-18-6	38	22	69	115 000	*
83-18-10	38	22	69	115 000	*

* The deviations from the specification in the picture are noticed in the drawings









ASSORTMENT OF STANDARD ROLLER BEARINGS







Single Row Angular Contact Ball Bearings



Double Row Angular Contact Ball Bearings ĐĢ $\overline{O}\overline{O}$



Double Row Self-Aligning Ball Bearings



Thrust Ball Bearings

S









Single Row Tapered Roller Bearings









> Calculations and tests proved longer usability and durability of KINEX bearings, improved safety and lower maintenance costs.

> Benefits of KINEX BEARINGS

- technical parameters going beyond standards
- new performance dimension in industrial applications
- extension of operating life
- special solution made to meet the customer requirements



















Single-row Full-complement Cylindrical Roller Bearings



Double-row Full-complement Cylindrical Roller Bearings



Double - Row Spherical Roller Bearings



Spherical Plain Radial Bearings



Spherical roller thrust bearings



Cylindrical Roller Thrust Bearings





Insert Bearings and Housed units



STANDARD BEARINGS APPLICABLE FOR TEXTILE INDUSTRY



Deep Groove Ball Bearings



> KINEX deep groove ball bearings are widely used in small to medium-sized electric motors, including those in HVAC systems, general industrial appliances, fans, and blowers. Our design allows them to handle both radial and light axial loads, providing low friction and high-speed performance. These bearings offer a balance of efficiency, durability, and low noise, making them ideal for quieter applications where reliability is key.

Boundary dimensions	Bore Diameter	Outer Diameter	Bearing Width
Series	d	D	В
6000 - 6034	10 - 170	26 - 260	8 - 42
6200 - 6230	10 - 150	30 - 270	9 - 45
6300 - 6321	10 - 105	35 - 225	11 - 49
6403 - 6418	17 - 90	62 - 225	17 - 54
16002 - 16030	15 - 150	32 - 225	8 - 24
ŀ	1		

E4 - E20	4 - 20	16 - 47	5 - 12	
Series	d	D	В	
 Boundary dimensions separable 	Bore Diameter	Outer Diameter	Bearing Width	

> KINEX is producing a complete range of deep groove ball bearings for the vast range of application in textile industry. Our special high speed electric motor grade ball bearings are specialized for the electric motor application where the speed goes to more than 2800 RPM. and the normal application ball bearings is also required in high volumes. This type of bearing is the major consumption item in textile industry and KINEX comes into picture where relibility and durability is key.

 Boundary dimensions thin-walled and miniature 	Bore Diameter	Outer Diameter	Bearing Width
Series	d	D	В
61800 - 61836	10 - 180	19 - 225	5 - 22
61900 - 61930	10 - 150	22 - 210	6 - 28
603 - 609	3 - 9	9 - 24	3 - 7
623 - 629	3 - 9	10 - 26	4 - 8
633 - 637	3 - 7	13 - 19	4 - 6

STANDARD BEARINGS APPLICABLE FOR TEXTILE INDUSTRY

Housed Units and Pillow Bearings







Units

Housed units range	Pillow bearings range	
UCP 201 - UCP 218	UC201 – UC218	> H
UCT 203 - UCT 217	US201 – US212	hou
UCF 203 - UCF 218	UD201 - UD210	pre
UCFL 201 - UCFL 218	UE201 - UE212	unit
		Grin





Bore Diameter	Outer Diameter	Bearing Width
d	D	В
10 - 100	30 - 180	9 - 34
10 - 130	30 - 230	9 - 40
17 - 804	7 - 170	14 - 39
12 - 110	37 - 240	12 - 50
	Diameter d 10 - 100 10 - 130 17 - 804	Diameter Diameter d D 10-100 30-180 10-130 30-230 17-804 7-170











> Plummer Block Housed Units



> Four-Bolt Flanged Housed

> Housed units are critical components across many industries, providing secure, stable mounting and easy maintenance for bearings in a variety of applications. They help manage heavy loads, adjust tension, and accommodate different shaft configurations, all while protecting the bearing from contaminants and ensuring smooth operation. durability is key.

Housed units are a combination of insert bearings and a bearing busing, which can be in different shapes. Bearing units are supplied e-assembled. Bearings contain lubricant for longer life. If necessary, the its can be additionally lubricated.



 Boundary dimensions double-row 	Bore Diameter	Outer Diameter	Bearing Width
Series	d	D	В
3200E - 3220E	10 - 100	30 - 180	14,3 - 60,3
3200 - 3220 (2ZR, 2RSR)	10 - 100	30 - 180	14,3 - 60,3
3302E - 3320E	15 - 100	42 - 215	19 - 82,6
3302 - 3320 (2ZR, 2RSR)	15 - 100	42 - 215	19 - 82,6
3302E - 3320E	15 - 100	42 - 215	19 - 82,6

STANDARD BEARINGS APPLICABLE FOR TEXTILE INDUSTRY



Self-Aligning Ball Bearing



Boundary dimensions	Bore Diameter	Outer Diameter	Bearing Width
Series	d	D	В
1200 - 1220	10 - 100	30 - 180	9 - 34
2200 - 2220	10 - 100	30 - 180	14 - 46
1300 - 1320	10 - 100	35 - 215	11 - 52
2301 - 2320	12 - 100	37 - 215	17 - 73
	1		



Cylindrical Roller Bearings



Bore Diameter	Outer Diameter	Bearing Width
d	D	В
17 - 150	40 - 270	12 - 45
17 - 130	47 - 280	14 - 58
25 - 110	80 - 280	21 - 65
17 - 140	40 - 250	16 - 68
20 - 100	52 - 215	21 - 73
40 - 300	68 - 460	15 - 74
	Diameter d 17 - 150 17 - 130 25 - 110 17 - 140 20 - 100	Diameter Diameter d D 17 - 150 40 - 270 17 - 130 47 - 280 25 - 110 80 - 280 17 - 140 40 - 250 20 - 100 52 - 215

Designs >>





Boundary dimensions	Bore Diameter	Outer Diameter	Bearing Width
Series	d	D	В
21304 - 21322	20 - 110	52 - 240	15 - 50
22205 - 22240	25 - 200	52 - 360	18 - 98
22308 - 22340	40 - 200	90 - 420	33 - 138
23022 - 23040	110 - 200	170 - 310	45 - 82
23120 - 23140	100 - 2001	65 - 340	52 - 112
23218 - 23240	90 - 200	160 - 360	52,4 - 128
24020 - 24040	100 - 200	150 - 310	50 - 109
24122 - 24140	110 - 2001	80 - 3406	9 - 140





п
В
9 - 34
14 - 46
11 - 52
17 - 73

Bore

Outer

Bearing

POPULAR BEARINGS USED IN OPEN END SPINNING INDUSTRY

> These bearings are used dominantly in machines like Open End Spinning, Carding Machines, Draw Frames, Blow Room Machines, Fibre Recycling machines, Electric Motors, Compressors, AC Plants and H Plants machinery and many other supporting machineries.

Deep Groove Ball Bearings

- 6000 6014
- 6200 6210
- 6300 6313
- Miniature 625, 626, 628, 608, 61800, 6800

The above range of bearings are supplied in Seal 2RS, ZZ and Open types.

Cylindrical Roller Bearings

- NJ 2205 NJ 2210
- NU2205 NU2210
- N304 E N309 3

Spherical Roller Bearings

- 22205 22222
- 22308 22315

Supplied in CA, CC and MB cage, in straight bore and K bore.

- 7202 7208
- 3202 3208









Angular Contact and Self Aligning Ball Bearings

The above range of bearings are supplied in Seal 2RS and $\ensuremath{\mathsf{ZZ}}$ 1204 - 1215 (PLAIN & K BORE) 1305 - 1312 (PLAIN & K BORE)





YOUR PARTNER FOR INDUSTRY













> Contact

KINEX BEARINGS, a.s. 1.mája 71/36 014 83 Bytča Slovakia +421 41 5556 620 marketing@kinexbearings.sk www.kinex.sk



