



CKA Birla Group |



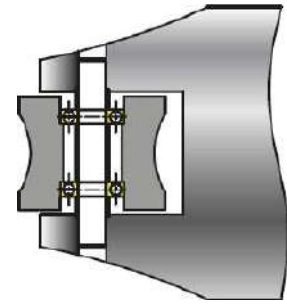
## Wire Guide Box Bearings

Deep Groove Ball Bearings



## Special Series Ball Bearings for Guide Box

The guide box bearings go through very harsh operating conditions. Major challenges faced in guide box bearings are:



### Contamination

In guide box application, contamination is a major challenge. Contaminants like dirt and water infiltrate bearings, causing accelerated wear and potential failure.

### High Speed

Bearings at high speeds and under rapid acceleration experience higher friction and heat. This results in lubrication film depletion and can cause bearing wear.

### Lubricant Washout

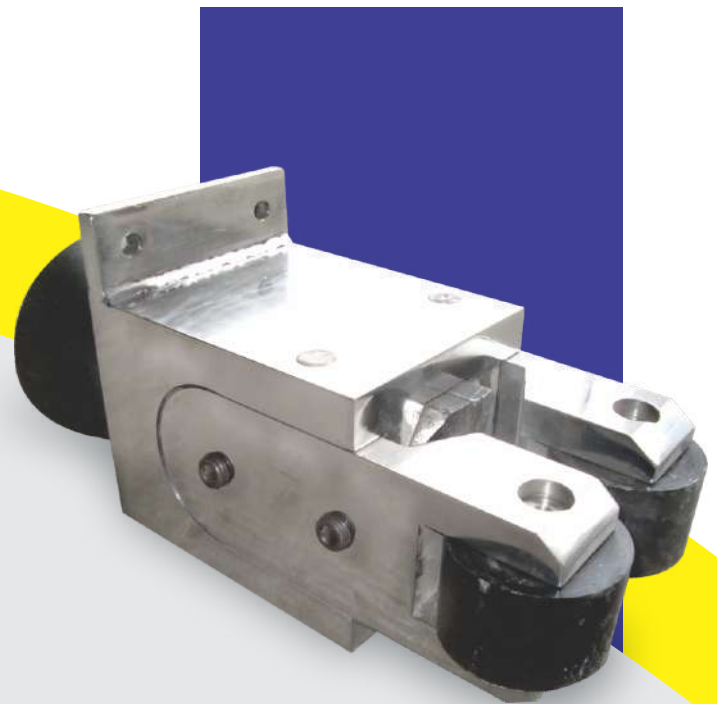
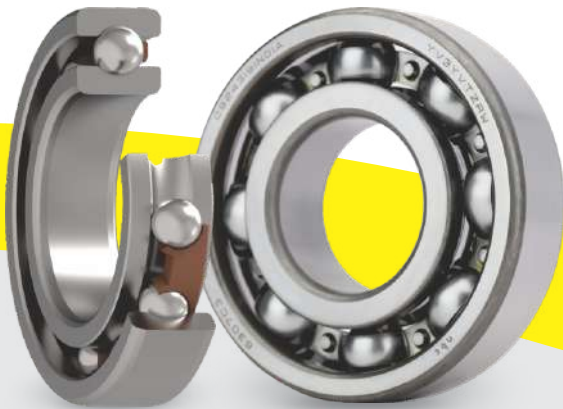
Due to harsh conditions and continuous water flow, lubricant washout is a major problem in guide box applications.

### Frequent Acceleration/Deceleration

High and frequent acceleration/ deceleration impacts the cage and may lead to premature failure of it.

### Corrosion

Exposure to moisture can cause corrosion in bearings, which may lead to failure.



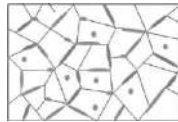
## Excess Grease Fill

- **Enhanced Lubrication:** Excess grease ensures that all bearing surfaces are well-lubricated, reducing friction and wear.
- **Sealing Effect:** The additional grease helps in sealing the bearing, preventing contaminants and moisture from entering.
- **Special Grease:** Special synthetic grease fill to withstand high speed and harsh environment conditions.

## Special Triple Lip RSA Seal

- **Enhanced Contaminant Protection:** The triple lip design ensures better protection against dust and water, extending the bearing's lifespan.
- **Improved Lubricant Retention:** Helps maintain lubrication within the bearing, reducing wear and tear, and enhancing bearing life.
- **High-Temperature Tolerance:** Special seal material like FKM seals can withstand high temperatures, ensuring reliable performance in demanding environments like guide box.
- **Wear Resistant:** Special seal material provides enhanced wear protection against hard particles. This leads to longer life of seals and lubricant.

## Features & Benefits



### Special TF Heat Treatment

- **Enhances Wear Resistance:** Increased Surface Hardness gives durability under high friction conditions and in harsh environments.
- **Improved Fatigue Strength:** Extends the operational life by withstanding repeated stress and mechanical loads generated due to frequent re-entry.
- **Enhanced Corrosion Resistance:** This special heat treatment improves resistance to corrosion, beneficial in harsh environments like guide box.
- **Longer Lifespan in Compromised Lubrication:** TF heat treated bearings perform well in poorly lubricated and contaminated conditions, like guide box, extending their lifespan.

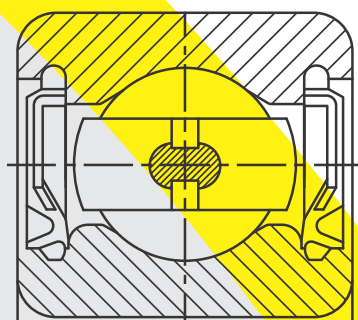


### High Strength Polymer Cage

- **Lightweight:** Specially designed polymer cages are significantly lighter, which reduces the overall weight of the bearing assembly and improve performance in high-speed applications.
- **Self-Lubricating Properties:** This cage has inherent self-lubricating capabilities, which is beneficial in environments with marginal lubrication.
- **High Elasticity:** The material's elasticity allows it to absorb shocks and vibrations, making it suitable for applications with high acceleration and deceleration like guide box bearings.

## NBC Bearings Solutions for Ball Bearings

Part No.	ID (mm)	OD (mm)	Width (mm)	Cr (kN)	Cor (kN)
ASTB 6201-2LVA1 T3X	12	32	10	6.90	3.10
ASTB 6202-2LVA1 T3X	15	35	11	7.75	4.60
ASTB 6203-2LVA1 T3X	17	40	12	9.60	4.60
ASTB 6204-2LVA1 T3X	20	47	14	13.70	6.70
ASTB 6000Z T3X	10	26	8	4.56	1.96
ASTB 6201Z T3X	12	32	10	6.90	3.10
ASTB 6202Z T3X	15	35	11	7.75	3.60
ASTB 6205-2LVA1 T3X	25	52	15	14.01	7.87
ASTB 6207-2LVA1 T3X	35	72	17	25.70	15.30
ASTB 6307-2LVA1 T3X	35	80	21	33.40	19.20
ASTB 6208-2LVA1 T3X	40	80	18	29.50	18.10
ASTB 6302-2LVA1 T3X	15	42	13	11.43	5.43
ASTB 6303-2LVA1 T3X	17	47	14	13.50	6.55
ASTB 6206-2LVA1 T3X	30	62	16	19.46	11.31
ASTB 6000-2LVA1 T3X	10	26	8	4.56	1.96
ASTB 6001Z T3X	12	28	8	5.1	2.4
ASTB 6001-2LVA1 T3X	12	28	8	5.1	2.4



### Improved Surface Finish

- **Reduced Friction:** Smoother surface and precise accuracy minimize friction which enhances bearing performance at higher speeds.
- **Better Lubrication:** Improved surface finish helps in better lubrication film formation which enhances bearing life.

C2 Clearance in standard product. C3 and CN clearance also available on request. Available in Z type non-contact single side seal for Oil Air lubrication \*Other sizes are also available on customer request. \*\*For further information contact NEI Application Engineer.

## Other Products from NBC Bearings

Since the challenges faced by industry are many, NBC offers a diverse range of exceptional bearings.



Deep Groove Ball Bearing



Tapered Roller Bearing



Cylindrical Roller Bearing



Needle Roller Bearing



Spherical Roller Bearing Steel Cage



Double Row Tapered Roller Bearing



Double Row Angular Contact Bearing



Sealed Spherical Roller Bearing



Spherical Roller Bearing Brass Cage



Spherical Roller Thrust Bearing



Insulated Ball Bearing



Hybrid Ball Bearing



Oil Impregnated Bearing



4 Row Cylindrical Roller Bearing Steel Cage



4 Row Cylindrical Roller Bearing Brass Cage



4 Row Tapered Roller Bearing



4 Row Sealed Tapered Roller Bearing



Pillow Block UCF



Pillow Block UCP

NBC bearings are available in sizes from 06 mm bore to 2000 mm outer diameter.

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