

PACKAGING SOLUTIONS

NTN-SNR's packaging offer



www.ntn-snr.com



With You





NTN-SNR NTN-SNR THE STRENGTH OF A GROUP

An expert in Product Life Cycle Management, NTN Corporation is typified by the accessibility and commitment of its teams. We anticipate development projects within your strategic markets. Our engineers work with you to design specific solutions to your market. Our NTN and SNR brands contribute to the excellence of your machines, helping to promote them.

NTN-SNR

THE ANSWER TO ALL OF YOUR BEARING REQUIREMENTS

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NTN-SNR THE PREMIUM ANSWER

The proper and marketable state of a product is shown by its packaging, whose manufacture and implementation are governed by many constraints.

NTN-SNR guarantees optimum solutions based on its experience and know-how, in compliance with the requirements resulting from the different links in the packaging chain. NTN-SNR offers a broad and comprehensive range (can be used as spare parts or for initial fittings), quality products (that ensure the long working life of your machines) and maintenance solutions.

NTN-SNR collaborates with you to help to guarantee the quality of your line and your finished products.

OUR REQUIREMENTS IN SUPPORT OF YOURS



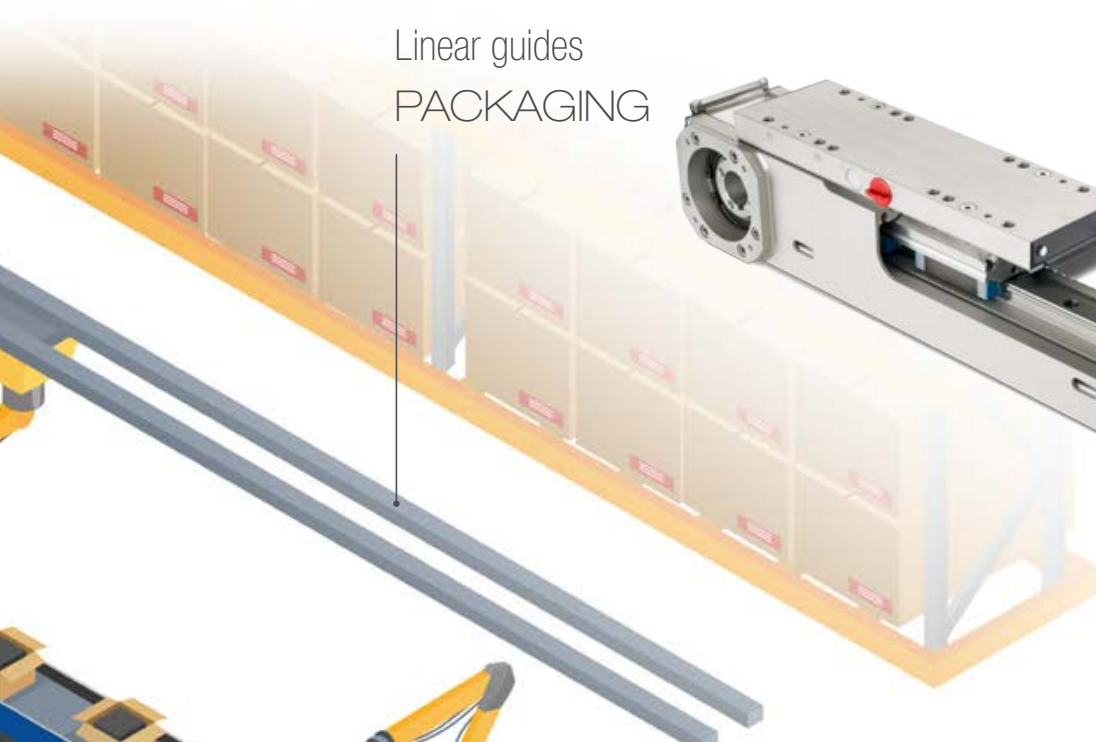
Self-aligning bearings
PACKAGING



Needle roller bearings
HANDLING



Linear guides
PACKAGING



Deep-groove ball bearings
PRINTING
AND LABELLING



Lubrication



Deep-groove **BALL BEARINGS**

CONFIDENCE IN OUR PRODUCTS

With years of experience as manufacturers NTN-SNR can guarantee quality and sturdy ball bearings.

FULL RANGE AVAILABLE

With over 10,000 active references and bore diameters from 1.5 mm to 1,320 mm, NTN-SNR offers one of the most comprehensive ranges of deep-groove ball bearings on the market, both in size and in the wide choice of available options (cages, sealing, materials, grease types, internal clearances, etc.).

SPECIFIC READY-TO-USE PRODUCTS

NTN-SNR offers technical product ranges adapted to your needs:

- **Temperature constraints (low and high temperature):** TOPLINE range – products LT, FT150, HT200, F600 – double seal, clearance and lubrication adapted to operating conditions
- **Corrosion constraints:** range of sealed deep-groove ball bearings in stainless steel S6xxx.2RS
- **Non-stop operation constraints:** range of double sealed deep-groove ball bearings with LLU solid lubricant (6xxxLL/LP03)
- **Hygiene constraints:** range of deep-groove ball bearings in stainless steel with solid lubricant as standard (SSNXXXLL/LP03) or food-grade certified (SSNXXXLL/LP09 - approved FDA & NSF-HS1)



PACKAGING

Most European plastic bottle manufacturers and leading drinks brand put their trust in NTN-SNR to sustain the performance of their lines, while continuing to respect optimum aseptic conditions.

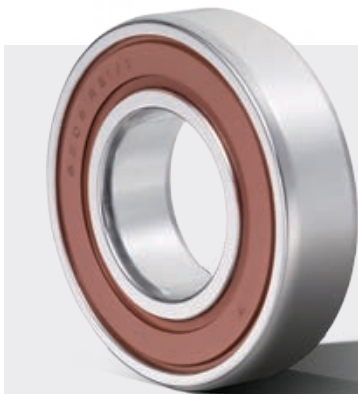


PRINTING AND LABELLING

NTN-SNR, conscious of the constraints imposed by costs and deadlines, offers **a range of technical products that are affordable, available and ready-to-use.**

Available from stock, FT150 & HT200 from the Topline range will meet your needs for operating conditions up to 200°C.

NTN-SNR is on your side to help you optimise quality and productivity.



Features:

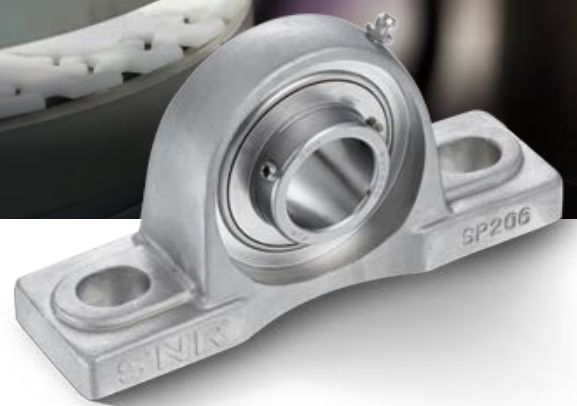
- Excellent sealing capacity with LLU technology
- Products adapted to high and low temperatures
- Corrosion-resistant products

Benefits:

- Extended service life
- Limitation of line downtime
- Simplified maintenance
- Aseptic conditions maintained



SELF-ALIGNING BEARINGS



FROM STANDARD TO SPECIFIC

The NTN-SNR range of self-aligning bearings meets all the needs of the market, from normal to highly specialised applications.

A PRODUCT OFFER ADAPTED TO YOUR NEEDS

NTN-SNR offers a wide range of self-aligning bearings, complying with European (DIN) and Asian (JIS) standards:

- Materials: grey cast iron, steel, stainless steel or thermoplastic
- Models: pillow-block bearings, flange bearings, take-up pulleys, big-end or cartridge bearings
- Shaft fixing: cone-pointed screw, eccentric ring, sleeve or adjustment
- Sizes: metric or inch
- Protective covers: stainless steel, cast iron, steel or thermoplastic

SPECIFIC TECHNICAL SOLUTIONS:

- **Temperature constraints:** self-aligning bearings for high-temperature T°C (suffixes HT2 & T20) or low-temperature T°C (suffixes CT1 & T04)
- **Noise and vibration constraints:** rubber-lined bearings (ESR2, etc. & CESR2, etc.)
- **Non-stop operation constraints:** self-aligning bearings with solid lubricant (suffix LP03 or LP06 & LP09 for food-grade)
- **Pollution constraints:** bearings with enhanced seals (triple-lipped seal suffix L3 & LLJ or labyrinth seal suffix L4)
- **Other:** bearings with special bore (square or hexagonal, bearings with special coatings, housings in special shapes, etc.)



PACKAGING

Thermoplastic range of self-aligning bearings with L4 seal: reference SUCTPA208L4

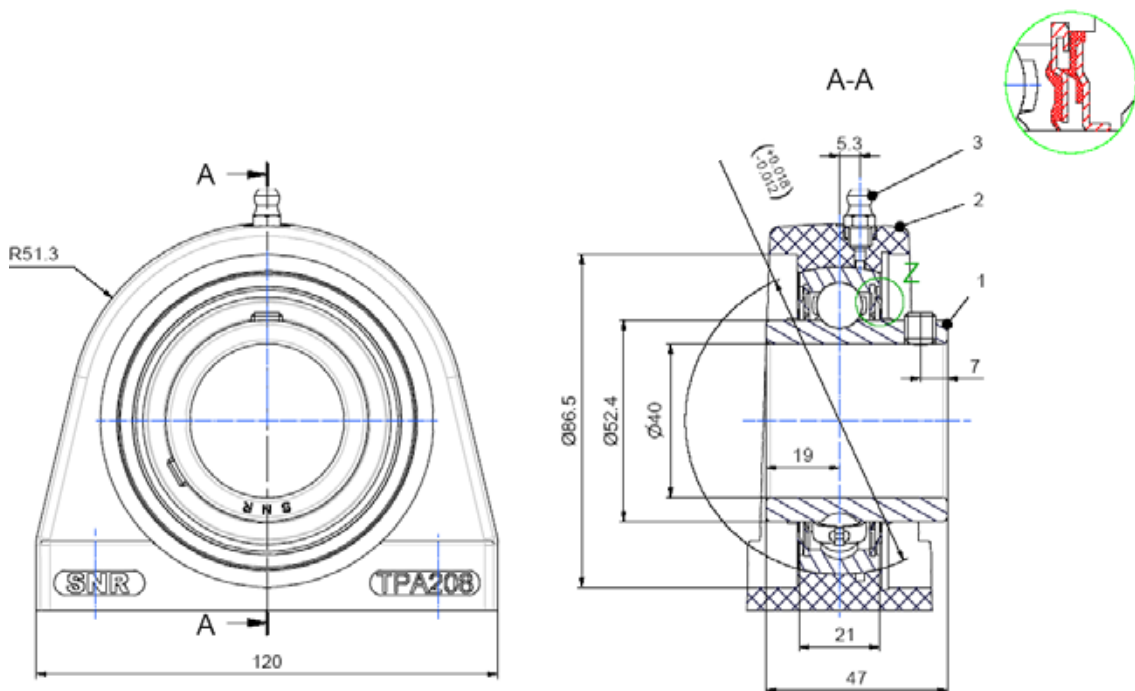


Features:

- Excellent sealing capacity thanks to the L4 seal
- Product FDA certified for contact with foodstuffs
- Corrosion-resistant product thanks to built-in stainless-steel bearings
- Purpose-designed, specially developed shape

Benefits:

- Extended service life
- Limitation of line downtime
- Aseptic conditions maintained





NEEDLE ROLLER BEARINGS

NTN, THE JAPANESE MARKET LEADER, IS GROWING IN EUROPE

With over 50 years of experience in the field of needle-roller and cam followers, NTN is the undisputed leader in Japan for industrial applications.

NTN's products are exported to every continent, and NTN-SNR invites you to take advantage of its know-how in Europe.



PREMIUM QUALITY NEEDLE-ROLLER AND CYLINDRICAL-ROLLER BEARINGS

The systematic pursuit of excellence characteristic of NTN's philosophy ensures that its needle-roller and cam followers display exceptional levels of performance. The result: extended service life and unfailing reliability, as witness thousands of customers who use them worldwide.

PRODUCT AVAILABILITY AND SUPPORT CLOSE TO YOU

NTN-SNR has established a Europe-based technical support unit to advise its customers and offers personalised studies. NTN-SNR maintains a stock of over 2,000 references in the Lyon region, for excellent availability and short delivery times.

AN EXCEPTIONALLY WIDE RANGE OF:

- Needle or roller-thrust bearings
- Needle cages
- Needle bushings
- Needle bearings with thick rings
- Combination bearings
- Cam-follower with shaft
- Cam-follower





HANDLING

Standard applications: telescopic forks on automated pallet-storage systems

NTN cam followers: a wide range to meet your requirements

Long service life under heavy loads: our cam followers are available in cageless versions («full complement») for increased load capacities. Examples: NATV – NUTR - KRV - NUKR

External environment respected: sealed versions to remove grease leaks and limit pollution of the external environment. Examples: NATR..LL – NATV..LL – KRV..LL



Choice of greases for all environments:

- Low-temperature grease (down to -40°C) for cold storage
- Food-grade greases
- Solid greases (food-grade or other)

High-performance cam-follower greased for life (suffix «DOH»):

- High-performance grease already present in the cam-follower with shaft; no maintenance needed
- Sealed: no contamination of the environment
- Hexagon-shaped hole for easy fitting

LINEAR GUIDES

QUALITY AND AVAILABILITY

NTN-SNR has been developing and manufacturing linear products for more than 30 years. Our production in Germany (Bielefeld) is founded on know-how, quality and excellent responsiveness. This extensive range offers solutions for all applications. Guiding and driving systems can be combined to create modules adapted to the needs of the market.

A STANDARDISED PRODUCT RANGE

NTN-SNR incorporates the best linear guiding technologies available today and is thus able to offer standardised products of the desired length, interchangeable with those of other manufacturers.

RAILS/ROLLER GUIDES

Sizes: 15 - 55 (standard range)

Sizes: 07 - 15 (miniature range)



- Standard ball bushings and super ball bushings (self-aligning)
- Dimensions according to ISO 10285 (interchangeable)
- Available in standard or stainless steel
- Support rails, shaft-support bearings, double shaft-support bearings, solid or hollow shafts

New generation high-load capacity:

- Standard version (LGBX) or version with patented ball cage (LGBC - low maintenance)
- Rail butt-sealing system with no constraints
- 4 rows of balls: 45° X contact (assembly in any direction)
- Dimensions according to DIN645 (interchangeable)
- Possible lubrication points: faces, 4 sides and at the top
- Double-lip total seals as standard
- Anti-corrosion surface treatment available on request



BALL BUSHINGS

Diameter: 3 to 150 mm



A PERSONALISED REPLY

NTN-SNR offers the best of its experience with linear modules and complete specific systems to meet any requirement (up to 1 tonne, more on request):



AXC RANGE

Size: 40, 60, 80, 100, 120



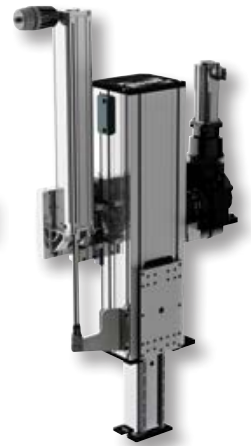
AXLT RANGE

Size: 155, 225, 325, 455



AXDL RANGE

Size: 110, 160, 240



LIFTING AND TELESCOPIC MODULES



XYZ GAMTRY AXES



AXBG RANGE

Size: 15, 20, 26, 33, 46, 55



COMBINATIONS OF MODELS

AXS, AXC AND AXDL



PACKAGING

The new range of AXF100 products from NTN-SNR has been developed for applications in highly specialised domains such as medicine, the pharmaceutical industry and the agri-food sector. All the materials used comply with FDA (Food and Drug Administration) regulations.



AXF range/size 100 based on the AXC range:

- Available with toothed belt drive and recirculating ball screw
- Range with specially developed seals to prevent deposit of residue in the profile
- Module specifically optimised for applications in the foodstuff sector

LUBRICATION

LUB'SOLUTIONS – NTN-SNR'S ANSWER TO LUBRICATION CONSTRAINTS

LUB'SOLUTIONS combines lubricants specially selected for different applications, together with the necessary means for the reliable distribution of the optimum amount of grease required by each mechanical unit.



NTN-SNR GREASES



UNIVERSAL+

General purpose grease for industrial use



HEAVY DUTY +

Suitable for very high loads, compatible with many applications, intended for arduous applications



HIGH SPEED+

Low-temperature grease for very high speeds



HIGH TEMP

This grease is ideal for long-term lubrication at high temperatures up to +150°C. Accepts peaks of +175°C



FOOD / FOOD AL

Multi-purpose grease for the food and pharmaceutical industries. Complies with NSF-H1 recommendations



FOOD CHAIN OIL

Food-grade oil for chains designed for the food-processing and pharmaceutical industry. Complying with NSF-H1 recommendations



CHAIN OIL

Synthetic oils for high temperature chains



ULTRA HIGH TEMP

Grease for long-term lubrication for any type of bearing subjected to extreme temperatures. Registered H1: can be used in food-processing industries

SINGLE-POINT LUBRICATION SYSTEMS



The flexible, economical solution for automating your greasing systems.

- Ready-to-use and economical
- Watertight and dust-proof
- Easy verification of lubricant level
- Pressure of 5 bar and temporary deactivation permissible
- IP68

Make the lubrication of your machines more reliable with an economical lubrication system that takes temperature into account.

- Constant flow rate independent of temperature
- Duration adjustable to the nearest month by keyboard and visible on-screen
- Can be used in explosive atmosphere zones (ATEX)
- Reusable control unit

The ultimate weapon to solve all your lubrication problems!

- Constant pressure of 6 bar
- LCD screen makes programming quick and easy
- Quick remote checking with the reusable remote-control unit

MULTI-POINT LUBRICATION SYSTEM

POLIPUMP: CENTRALISED LUBRICATION FOR ALL

- Simultaneous lubrication of up to 35 greasing points, using the grease of your choice
- Max. distance 20 metres
- Quick and easy to install, no technical skills needed
- Used for greasing bearings, chains, recirculating-ball screws, linear guides, etc.
- Operates with grease grades NLGI 00 to NLGI2
- 6 pump elements with different flow rates



PACKAGING

GREASE FOR FOOD INDUSTRY APPLICATIONS (FOOD SURE)

For the agri-food and pharmaceutical industries.
Complying with NSF-H1* recommendations.



Standard applications: all machines where accidental contact with foodstuffs may occur (bottling machines, dairy equipment, industrial pastries, production of pasta, confectionery manufacture, abattoir, etc.)

Benefits:

- Can be used across a wide temperature range
- Good corrosion protection
- High resistance to washing with cold or hot water and to disinfectant and detergent solutions

Features: wide operating temperature range (-25°C to +120°C).

* NSF: National Sanitation Foundation/H1: occasional contact with foodstuffs.



OIL FOOD CHAIN OIL

Complying with NSF-H1* recommendations

Standard applications: ideal for lubricating lifting, drive and conveyor chains, even at low temperatures.

Benefits: remains very stable over time and resists oxidation

- Good protection against wear and corrosion as well as resistance to seizing
- Neutral in relation to sealants and paints

Features:

- Wide operating temperature range: -30°C to 120°C



PACKAGING SOLUTIONS

NTN-SNR's packaging offer



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