



# SOLUTIONS FOR THE **FOOD-PROCESSING INDUSTRY**

The complete offer for optimal and risk-free production

**NTN**® **SNR**®

[www.ntn-snr.com](http://www.ntn-snr.com)



With You



## NTN-SNR A LEADING PLAYER

An expert in Product Life Cycle Management, NTN Corporation is typified by the accessibility and commitment of its teams.

We anticipate development projects on your strategic markets. Our NTN and SNR brands contribute to the excellence of your machines, helping to promote them.



## FOOD-PROCESSING: AN ENVIRONMENT WITH SUBSTANTIAL CONSTRAINTS

From the basic product to the finished product, thanks to our know-how we can offer you a range that is technically adapted to each of your constraints. To ensure your production process is sustainable and meets hygiene standards, we bring you optimal and customised solutions.



**HIGH-PRESSURE WASHING**



**CLEANING AGENTS**



**HUMIDITY**



**FINE PARTICLES**



**TEMPERATURES**



**HYGIENE STANDARDS**



**HIGH RATES**



## SUCCESS STORY

**How does LUBSOLID® NTN-SNR improve the filling and capping operations of beverage production plants on the other side of the Atlantic?**

The bottling line of a major beverage bottling and distribution site in Florida had broken down repeatedly. The loss of production had been put at €0,000 per month.

The local team therefore carried out a thorough assessment of the line and its 120 filling nozzles. It identified 20 monthly head failures that caused a machine shutdown of between 60 and 90 minutes. The cause: a lubrication fault.

### THE NTN-SNR SOLUTION

On NTN-SNR's recommendations, the standard bearings were replaced with solid-grease bearings. These NSF-H1-certified food-grade solid grease self-aligning ball bearing inserts are made of stainless steel. In addition, they are protected by reinforced contact seals.

Direct washing represents a significant threat to the durability of production equipment. The resistance of LUBSOLID® products extends their service life by a factor of 20.

### RESULT

95 % of machine failures and shutdowns have been eliminated.

Reduced downtime and lower maintenance costs have led to **a global saving of €183,000 per year**. It is no longer necessary to regrease the bearings, which saves valuable time for the maintenance

teams. The risk of chain contamination due to lubrication leaks was significantly reduced. For these reasons, the site has since converted all of its applications similar to our LUBSOLID® products.

### ANNUAL SAVING ACHIEVED

#### MACHINE AVAILABILITY

-€120,000

#### MAINTENANCE COSTS

-€48,000

#### CONSUMPTION OF BEARINGS

-€15,780

#### TOTAL SAVED

-€183,780

# DISCOVER

all our ranges for the food industry through our main business lines.

## TOPLINE BALL BEARINGS

Designed for extreme temperatures

>>> [Reduction of the machine shutdown time](#)

6



## THERMOPLASTIC MOUNTED UNITS

Specifically designed to prevent the collection of dirt

>>> [Compliance with hygiene standards](#)

8



## STAINLESS STEEL MOUNTED UNITS

The ideal solution against humidity

>>> [Increase in the service life of equipment](#)

10



## STAINLESS STEEL BALL BEARINGS

A shield against corrosion

>>> [Reliability of the production chain](#)

12



## LINEAR AXIS AND BALL BUSHINGS

Designed to cope with demanding environments

>>> [Reduced maintenance frequencies](#)

14



## LUBSOLID®, FOOD-GRADE SOLID GREASE

For faultless lubrication

>>> [User comfort without maintenance](#)

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## LUBRICATION SOLUTIONS

Adaptable to each application

>>> [Optimal and secure solutions](#)

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## PRODUCT REFERENCES

Easy and convenient access to all the technical data of our offer

>>> [To make the right choice](#)

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## TOPLINE BALL BEARINGS DESIGNED FOR EXTREME TEMPERATURES

### TECHNICAL CHARACTERISTICS

- Special lubricants and sealings materials for use between -60 °C and 200 °C
- F600 and F604 ranges for very high temperatures (up to 350 °C)
- F6xx series with increased internal clearance to compensate for the effects of expansion

### BENEFITS

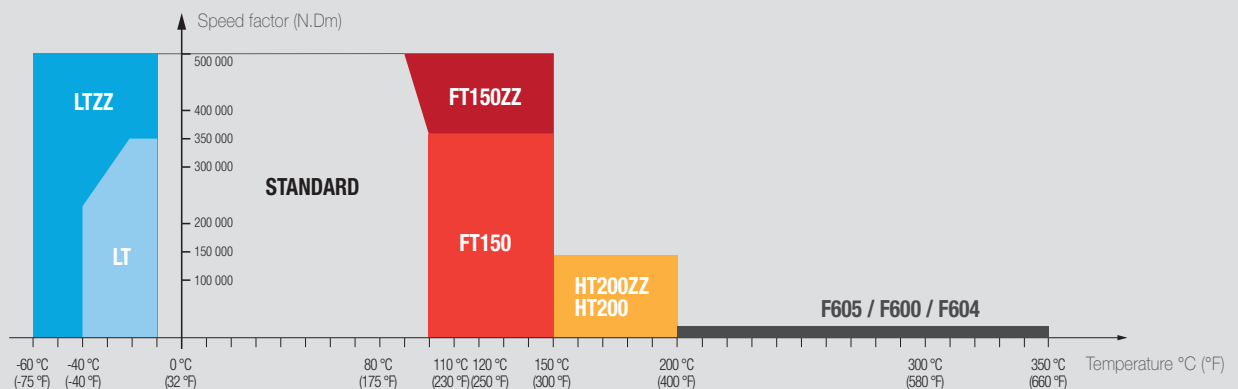
- Reduced number of machine shutdowns: time saving
- Firm control over your maintenance intervals thanks to consistent product quality

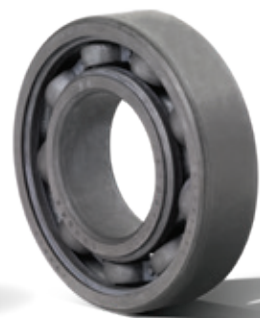
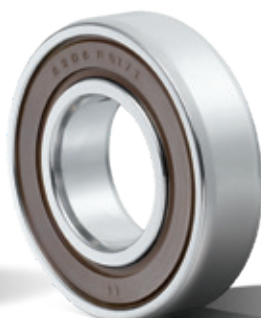
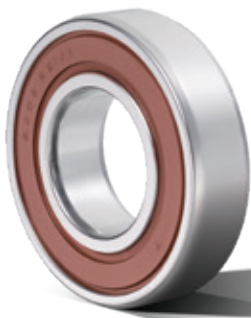


TEMPERATURES



FINE PARTICLES





### FT150 & HT200 ranges

These ranges offer optimal solutions for high temperature applications (maximum of 150 °C and maximum of 200 °C, respectively). The FT150 and HT200 ranges are perfect for the conveyors used in furnaces, dryers, broilers, ovens, etc.



### LT range

Good performance at low temperature thanks to its specific type of grease. It also has good moisture resistance and is ideal for refrigeration environments in the food-processing industry.



### F6xx range

Dedicated to applications at very high temperature (350 °C) and low speed (50 rpm maximum). For example, it is a component used in porcelain and building-material furnace trolleys. This range is therefore fully compatible with the highest-temperature kilns.



## TECHNICAL CHARACTERISTICS (Refer to pages 22-23 to discover the entire range)

Products	Cage	Internal clearance	Grease	Sealing	Other	Conditions of use
FT150 FT150ZZ	Steel	C3	Adapted to high temperatures	Fluorinated seals (FKM) or steel shields.	-	Maximum temperature: 150 °C (peak). Limiting speed: 500,000 N.Dm.
HT200 HT200ZZ	Steel	C4	Adapted to high temperatures	Fluorinated seals (FKM) or steel shields.	Specific heat treatment.	Maximum temperature: 200 °C (peak).
LT LTZZ	Steel	C3	Adapted to low temperatures and the presence of humidity. Lithium thickener + synthetic base oil.	Nitrile seals (NBR) or steel shields.	-	Low temperature down to -60 °C for LTZZ and -40 °C for LT. Limiting speed: 500,000 N.Dm.
F605	Steel	Multiple of C5	-	-	Brand is stamped.	Temperature range between 200 °C and 350 °C (continuous or in cycles). Limiting speed: 50 rpm. Moderate loads.
F600	Steel	Multiple of C5	-	-	Specific surface treatment (phosphatation + MoS2 deposit)*. Brand is stamped.	Temperature range between 200 °C and 350 °C (continuous or in cycles). Limiting speed: 50 rpm. Moderate loads.
F604	Steel	Multiple of C5	Suitable for very high temperatures. Polyalkylene glycol base oil + solid additive	Steel shields.	Specific surface treatment (phosphatation + MoS2 deposit)*. Brand is stamped	Temperature range between 200 °C and 350 °C (continuous or in cycles). Limiting speed: 50 rpm. Moderate loads.

\* The specific surface treatment on the F600 and F604 ranges provides better resistance to oxidation and good lubrication capacity. In the case of the F600 range, a suitable quantity of grease can be inserted into the bearing if necessary. Contact NTN-SNR for more information.



## THERMOPLASTIC MOUNTED UNITS SPECIFICALLY DESIGNED TO PREVENT THE COLLECTION OF DIRT



### TECHNICAL CHARACTERISTICS

- Polyester housings: resistance to corrosion, mildew and cleaning agents
- Additional covers with radial lip seal: resistance to direct washing, even at high pressure
- Smooth sole surface to prevent the collection of dirt
- Stainless steel metal parts

### BENEFITS

- Excellent internal and external protection
- Extra resistance during wash cycles
- Clean operating environment ensured



HIGH PRESSURE WASHING



CLEANING AGENTS



HUMIDITY



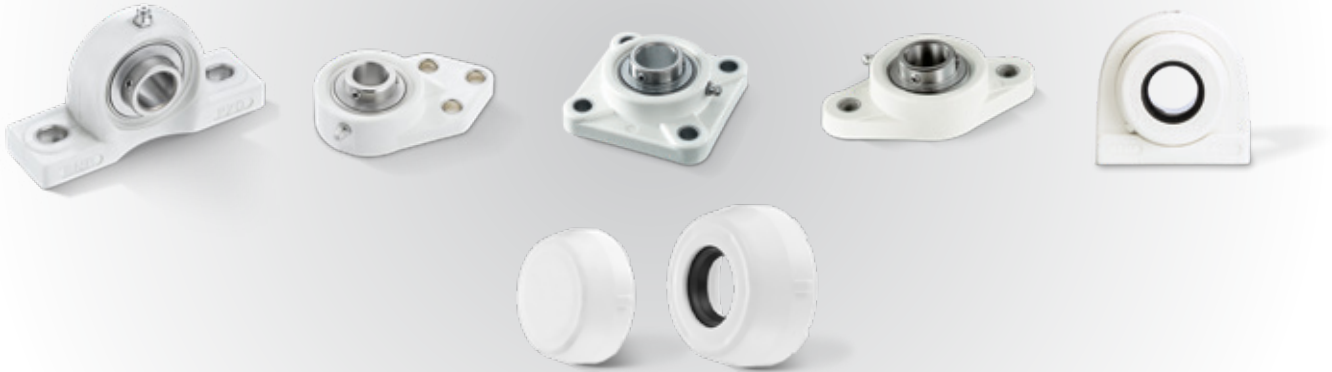
HYGIENE STANDARDS

### GOOD TO KNOW

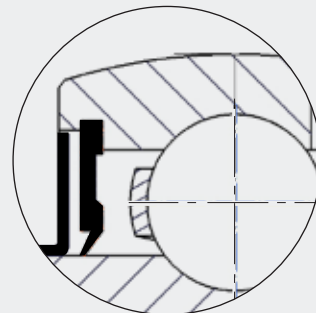
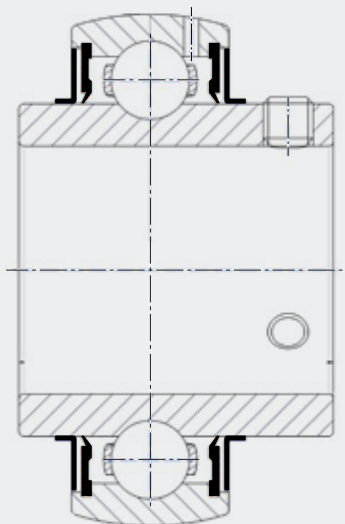
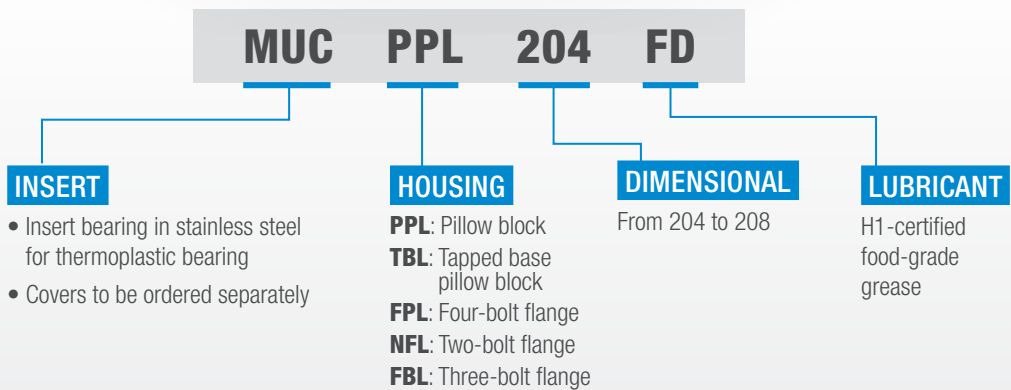
The bearings are pre-lubricated with a paraffinic mineral oil and aluminium complex (odourless and tasteless) food-grade grease compliant with FDA regulations. This grease is classified NSF H1 - occasional contact with food.



## AVAILABLE FLANGE BEARINGS



The inserts for the thermoplastic bearing range are available with **LUBSOLID®** food-grade solid grease





## STAINLESS STEEL MOUNTED UNITS THE IDEAL SOLUTION AGAINST HUMIDITY



### TECHNICAL CHARACTERISTICS

- High-quality stainless steel (housing and insert)
- Additional covers with double lip seal: optimum resistance to direct washing, even at high pressure
- Insert equipped with shield + elastomer seal against humidity and dirt
- Compliance with ISO standards to simplify your maintenance operations

### BENEFITS

- Protection against corrosion
- Absolute sealing of the bearing: prevention against external contaminants
- Interchangeability with standard bearings



HIGH PRESSURE  
WASHING



CLEANING  
AGENTS



HUMIDITY

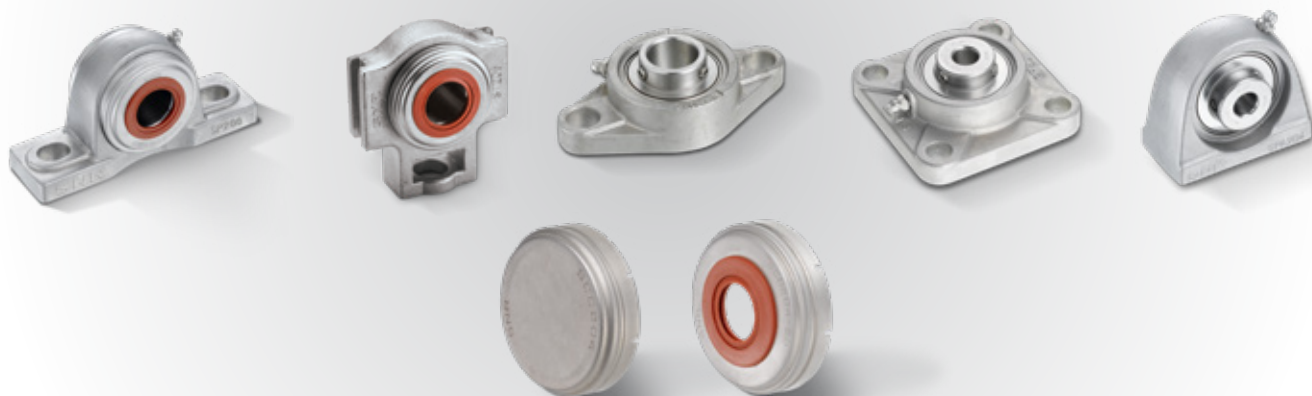


HYGIENE STANDARDS

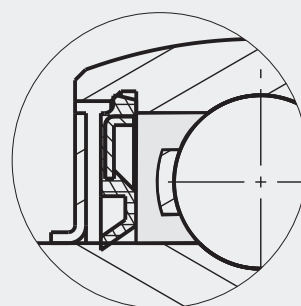
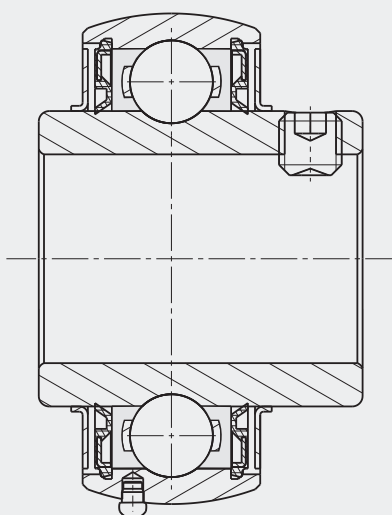
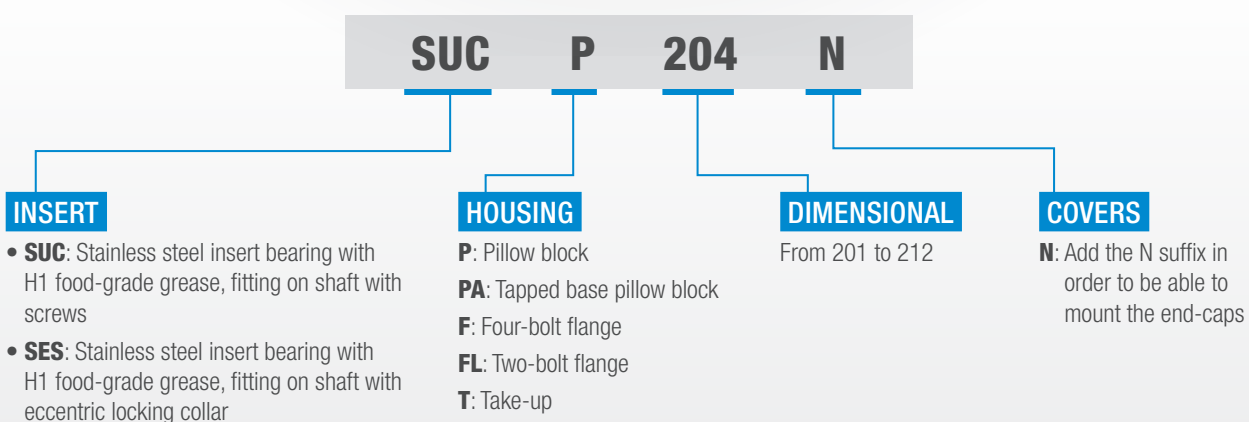
### GOOD TO KNOW

The bearings are pre-lubricated with a paraffinic mineral oil and aluminium complex (odourless and tasteless) food-grade grease compliant with FDA regulations. This grease is classified NSF H1 - occasional contact with food.

## AVAILABLE FLANGE BEARINGS



The inserts for the stainless steel bearing range are available with LUBSOLID® food-grade solid grease





## STAINLESS STEEL BALL BEARINGS A SHIELD AGAINST CORROSION

### TECHNICAL CHARACTERISTICS

- High-quality stainless steel
- Available with reinforced elastomer seals (2RS) or stainless steel shields (ZZ)
- Food-grade grease compliant with USDA H1 standards
- Available for 6000, 6200 and 6300 series (shaft diameters from 10 to 40 mm)
- Load capacity identical to that of standard steel bearings

### BENEFITS

- Very good resistance to corrosion
- Excellent resistance to outdoor pollution
- Keeps the production chain clean
- Performance of your lines is guaranteed even during load peaks



CLEANING  
AGENTS



HUMIDITY



HYGIENE STANDARDS

# x70

**Up to 70 times more resistant to corrosion.**

The stainless steel in our bearings is an ideal solution to ensure a long service life, even in the event of frequent washing.

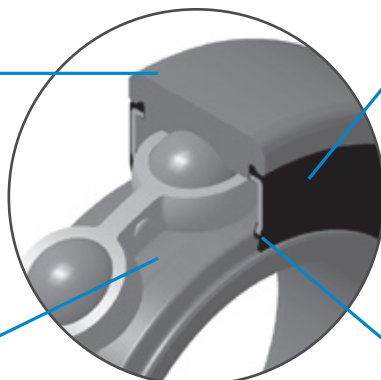
# STEEL QUALITY AND SEALING

## Stainless steel 440C

- Resistance to corrosion
- Load resistance

## Food-grade grease

- USDA H1 certification



## Nitrile butadiene seal

- Bearing protection
- Elimination of grease leaks
- Resistance to wearing

## Steel armature

- Holds the friction seal

**S6000**

**2RS**

**D136**

### MATERIAL

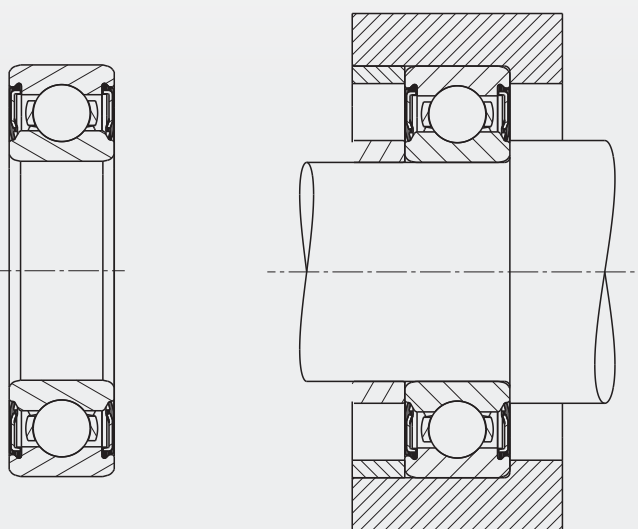
**S:** Stainless steel  
Type of series:  
Radial ball bearing series 6000

### SEALING

Double sealing

### LUBRICANT

H1 food-grade grease



# FRUIT AND VEGETABLES



## LINEAR AXIS AND BALL BUSHINGS DESIGNED TO COPE WITH DEMANDING ENVIRONMENTS



HUMIDITY



FINE PARTICLES

### TECHNICAL CHARACTERISTICS

- One of the best seals on the market (dust, water, corrosion)
- Smooth profile surface to prevent the collection of residue
- High compactness and rigidity
- Easy relubrication possibility

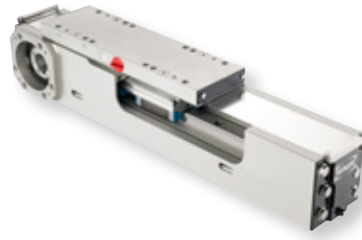
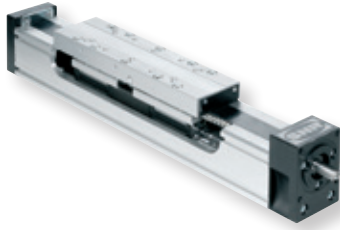
### BENEFITS

- Cleanliness of the production chain is always respected
- Reduced costs: easy installation and maintenance
- Tailor-made: dimensional constraints are taken into account

### GOOD TO KNOW

NTN-SNR has supplied linear systems successfully since 1985. These products, designed and assembled in our Design Centre in Germany, constitute one of the most complete and most attractive ranges on the market.

# LINEAR AXIS COMPACT MODULES



## AXC RANGE Sizes 40, 60, 80, 100, 120

The modular design permits the use of single modules or complex multi-axis systems

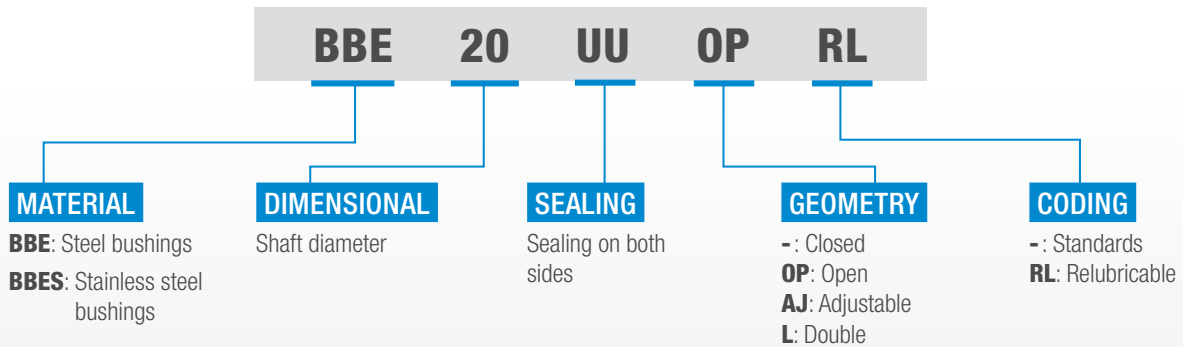
- Different guidance and drive options
- Omega drive: version with driven table

## AXF RANGE Size 100

Based on the AXC range

- Available with toothed belt drive and ball screws
- Specially developed range to prevent residue deposition in the profile
- Module specifically optimised for applications in the food, pharmaceutical and semiconductor industries

# LINEAR BALL BUSHINGS



# STANDARD BALL BUSHINGS BBE RANGE/DIAMETER 3 TO 80 MM



Closed



Adjustable (AJ)



Open (OP)



Double (L)

Available in solid steel/  
stainless steel cage  
(e.g.: BBE(S)20AUU)

# STANDARD FLANGED BALL BUSHINGS BBER RANGE/DIAMETER 8 TO 60 MM



Flanged



Tandem Flanged (L)



Middle Flanged (M)

Only in sealed version  
(e.g.: BBER20UU)

# READY MEALS



## LUBSOLID<sup>®</sup>, FOOD-GRADE SOLID GREASE FOR FAULTLESS LUBRICATION



GREASED FOR LIFE



HYGIENE STANDARDS

### TECHNICAL CHARACTERISTICS

- No empty space: the lubricant fills the whole of the bearing
- Grease compliant with FDA sanitary requirements
- No leakage of grease

### BENEFITS

- Reduction in the number of machine shutdowns and, as a result, maintenance time
- Insert fully sealed against corrosion and pollution
- No relubrication or maintenance
- Cleanliness of the production chain is guaranteed

# X20

### LESS DOWN TIME, MORE PROFIT

Thanks to LUBSOLID<sup>®</sup>, you can extend the service life of a bearing by a factor of 20, compared to a bearing lubricated with a standard high-performance grease. Furthermore, the bearing does not require regreasing.

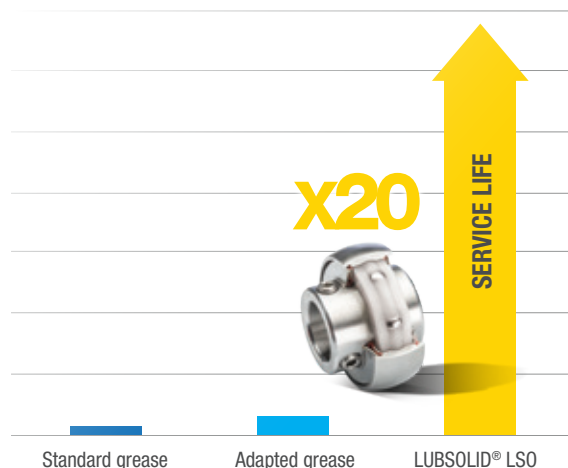
Specific solutions on request.



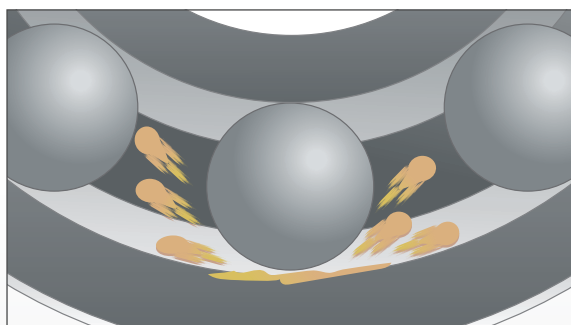
## WHAT IS LUBSOLID® ?

The concept is that of a porous polymer matrix containing a large quantity of oil. This matrix fills the free space in the bearing fully, thereby preventing pollution and water from entering. Due to its solid nature, this lubricant cannot flow out from the bearing and ensures the cleanliness of your environment.

Such reliability lets you extend the service life of a bearing by a factor of 20!

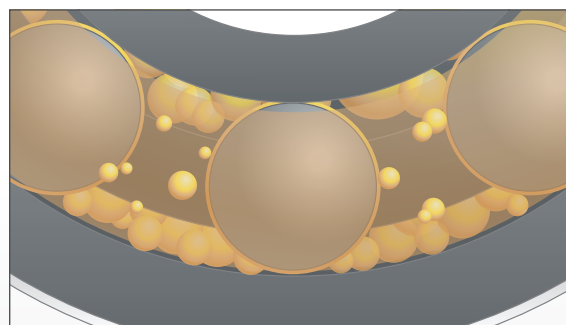


### Lubrication with standard grease

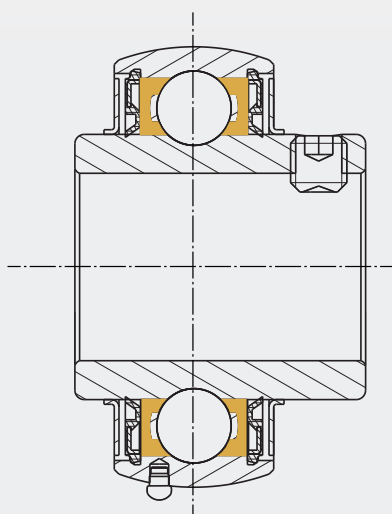


Due to mechanical and thermal stress, the grease is laminated and driven out of the contact surface between the rolling elements and the raceway. This loss demands frequent relubrication.

### LUBSOLID® lubrication



LUBSOLID® cannot be ejected, it constantly supplies the bearing core with oil. This spells the end for shutdown and relubrication operations.



### DIMENSIONS

Shaft diameter: 20 – 40 mm  
 Type of insert: SUC  
 Material: Stainless steel

**Inserts available with our stainless steel and thermoplastic housings, see pages 24-28**



## LUBRICATION SOLUTIONS ADAPTABLE TO EACH OF THE APPLICATIONS



EASY INSTALLATION



HIGH RATES

### TECHNICAL CHARACTERISTICS

- Compatible with several grades of grease (NLGI00 to NLGI2)
- Simultaneous lubrication of up to 35 lubrication points
- Constant output independent of the temperature

### BENEFITS

- Speed and ease of installation
- Improves the safety of maintenance personnel

### GOOD TO KNOW

55 % of premature faults that affect bearings are due to inappropriate lubrication and 17 % are due to incorrect mounting!  
NTN-SNR offers support during mounting and removal as well as tools and equipment to make these operations simpler and safer.  
Specific solutions on request.

## MULTIPOINT

### LOW-COST EASY TO IMPLEMENT CENTRALISED GREASING

Multi-point lubrication system (from 1 to 35 points) that increases the availability of equipment while reducing maintenance costs.

- 1** Determine the number of points that have to be lubricated, select the pumping elements and connect them.
- 2** Connect the pump to the electrical network.
- 3** Fill the tank with the selected grease.
- 4** Programme the lubrication cycles: the POLIPUMP is ready to operate.



## SINGLE-POINT

### THE CONSTANT AND REGULAR LUBRICATION OF BEARINGS

Optimises the greasing function without the need for any change to the installations.



#### READY BOOSTER

- Economical and flexible model
- For environments that are either humid, exposed to corrosion or require a maximum level of hygiene
- 60 cm<sup>3</sup> and 125 cm<sup>3</sup>



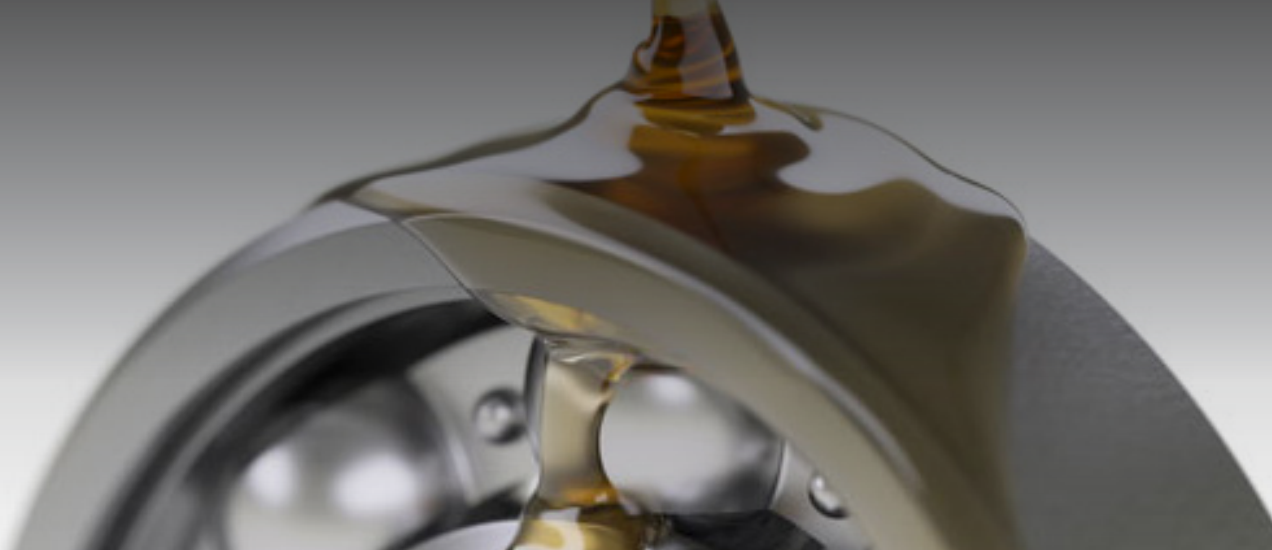
#### SMART BOOSTER

- Economical model independent of the temperature
- For applications subject to temperature variations
- 125 cm<sup>3</sup>



#### DRIVE BOOSTER

- High-end model for all situations
- Constant output, installation up to 5 metres from the lubrication point
- 120 cm<sup>3</sup> and 250 cm<sup>3</sup>



# LUBRICATION SOLUTION ADAPTABLE TO EACH OF THE APPLICATIONS

-30°C	ENVIRONNEMENT		+260°C
VERY COLD	COLD	HOT	VERY HOT



## FOOD AL (-25°C to 120°C)

Grease and oil for all applications where accidental contact with food is technically possible.

### BENEFITS

- Good protection against corrosion
- High resistance to washing with cold and hot water
- Robustness against disinfectants and detergents

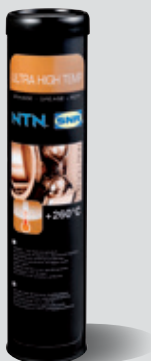


## FOOD CHAIN OIL (-30°C to 120°C)

Food-grade oil for chains and conveyors.

### BENEFITS

- Excellent ageing and oxidation stability
- Good protection against wear, corrosion and seizing
- Neutral in relation to sealants and paints



## ULTRA HIGH TEMPERATURE (up to 260 °)

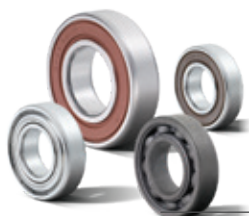
Grease for long-term lubrication of all bearing types operating at extreme temperatures.

### BENEFITS

- Good capacity to absorb pressure
- Excellent resistance to aggressive agents
- Compatible with most plastics

# PRODUCT REFERENCES

Select your range, consult our technical guide and choose the best solution for your needs.



## TOPLINE BALL BEARINGS

- High temperature series FT150/FT150ZZ (max +150°C)
- High temperature series HT200/HT200ZZ (max +200°C)
- Low temperature series LT/LTZZ (from -40°C to -60°C)
- Very high temperature series F6XX (max +350°C)

22-23

## STAINLESS STEEL MOUNTED UNITS

- Insert bearing with locking screw (SUC) – LUBSOLID® compatible
- With SUCP/SESP sole
- Flange bearing with 4 holes SUCF/SESF
- Flange bearing with 2 holes SUCFL/SESFL
- With sole with blind holes SUCPA/SESPA
- Take-up pulleys SUCT/SEST
- Protective covers SCO/SCC - SCOE/SCCE
- Insert bearings with eccentric locking collar (SES)

24-27



## THERMOPLASTIC MOUNTED UNITS

- Insert bearings with locking screw (MUC) – LUBSOLID® compatible
- Flange bearing with 3 holes MUCFBL
- Flange bearing with 4 holes MUCFPL
- Flange bearing with 2 holes MUCNFL
- With sole MUCPPL
- With sole with blind holes MUCTBL
- CV/CF protective covers

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## STAINLESS STEEL BALL BEARINGS SEALED VERSION

- Series 6000
- Series 6200
- Series 6300

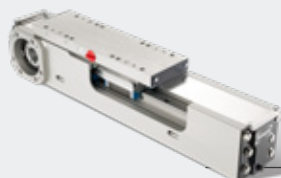
29



## LINEAR MOTION

- Stainless steel linear bushings BBES
- Linear modules AXF

30-33



## LUBRICATION SOLUTIONS

- Lubricants in cartridges or containers
- Single-point lubrication systems
- Multi-point lubrication system

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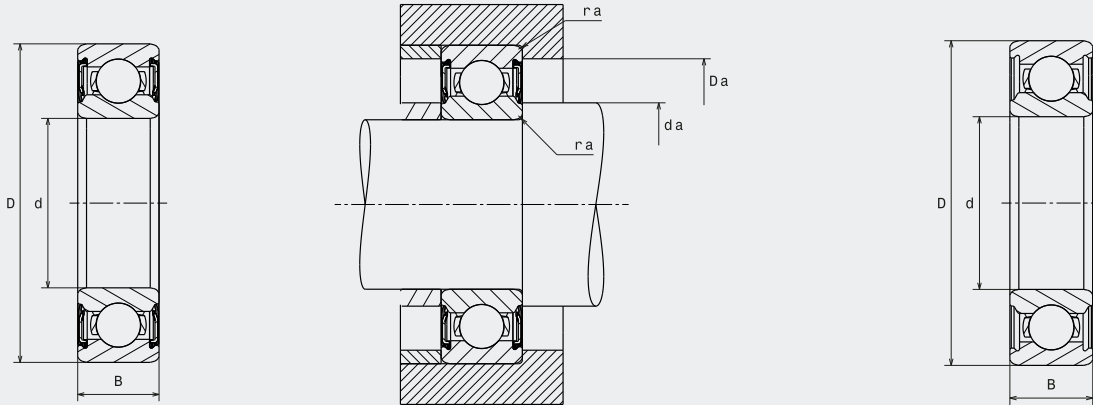


# PRODUCT REFERENCES

A technical solution to each need.

## TOPLINE BALL BEARINGS

### FT150, HT200 and LT



### F600

### High temperature series FT150/FT150ZZ

Ref.	Dimensions (mm)			Basic loading rate (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight (Kg)
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max	Da max	da min	da max	
6000FT150	10	26	8	4,5	2,0	-	20 000	0,3	24,0	12,0	14,7	0,02
6001FT150	12	28	8	5,0	2,4	-	17 000	0,3	26,0	14,0	17,2	0,21
6002FT150	15	32	9	5,4	2,9	-	14 000	0,3	30,0	17,0	20,5	0,03
6003FT150	17	35	10	5,8	3,3	-	13 000	0,3	33,0	19,0	22,8	0,04
6004FT150	20	42	12	9,2	5,0	-	10 000	0,6	38,0	24,0	27,5	0,07
6005FT150	25	47	12	9,8	5,8	-	9 100	0,6	43,0	29,0	31,6	0,08
6006FT150	30	55	13	13,0	8,3	-	7 500	1,0	50,0	35,0	38,2	0,12
6007FT150	35	62	14	15,7	10,3	-	6 600	1,0	57,0	40,0	43,5	0,15
6008FT150	40	68	15	16,4	11,5	-	5 900	1,0	63,0	45,0	48,9	0,19
6201FT150	12	32	10	6,8	3,1	-	16 000	0,6	28,0	16,0	18,3	0,04
6202FT150	15	35	11	7,7	3,8	-	14 000	0,6	31,0	19,0	21,1	0,45
6203FT150	17	40	12	9,4	4,8	-	12 000	0,6	36,0	21,0	24,1	0,07
6204FT150	20	47	14	12,6	6,6	-	11 000	1,0	42,0	25,0	25,9	0,11
6205FT150	25	52	15	13,8	7,9	-	9 000	1,0	47,0	30,0	31,8	0,13
6206FT150	30	62	16	19,2	11,3	-	7 600	1,0	57,0	35,0	37,9	0,20
6207FT150	35	72	17	25,3	15,3	-	6 500	1,0	65,5	41,5	44,0	0,29
6208FT150	40	80	18	28,7	17,9	-	5 700	1,0	73,5	46,5	50,3	0,37
6000FT150ZZ	10	26	8	4,5	2,0	28 000	28 000	0,3	24,0	12,0	14,7	0,02
6001FT150ZZ	12	28	8	5,0	2,4	24 000	25 000	0,3	26,0	14,0	17,2	0,21
6002FT150ZZ	15	32	9	5,4	2,9	22 000	21 000	0,3	30,0	17,0	20,5	0,03
6003FT150ZZ	17	35	10	5,8	3,3	20 000	19 000	0,3	33,0	19,0	22,8	0,04
6004FT150ZZ	20	42	12	9,2	5,0	18 000	16 000	0,6	38,0	24,0	27,5	0,07
6005FT150ZZ	25	47	12	9,8	5,8	15 000	14 000	0,6	43,0	29,0	31,6	0,08
6006FT150ZZ	30	55	13	13,0	8,3	13 000	12 000	1,0	50,0	35,0	38,2	0,12
6007FT150ZZ	35	62	14	15,7	10,3	12 000	10 000	1,0	57,0	40,0	43,5	0,15
6008FT150ZZ	40	68	15	16,4	11,5	11 000	9 100	1,0	63,0	45,0	48,9	0,19
6200FT150ZZ	10	30	9	5,9	2,6	23 000	25 000	0,6	26,0	14,0	16,0	0,03
6201FT150ZZ	12	32	10	6,8	3,1	22 000	23 000	0,6	28,0	16,0	18,3	0,04
6202FT150ZZ	15	35	11	7,7	3,8	20 000	20 000	0,6	31,0	19,0	21,1	0,04
6203FT150ZZ	17	40	12	9,4	4,8	18 000	17 000	0,6	36,0	21,0	24,1	0,07
6204FT150ZZ	20	47	14	12,6	6,6	16 000	15 000	1,0	42,0	25,0	25,9	0,11
6205FT150ZZ	25	52	15	13,8	7,9	14 000	13 000	1,0	47,0	30,0	31,8	0,13
6206FT150ZZ	30	62	16	19,2	11,3	12 000	11 000	1,0	57,0	35,0	37,9	0,20
6207FT150ZZ	35	72	17	25,3	15,3	10 000	9 200	1,0	65,5	41,5	44,0	0,29
6208FT150ZZ	40	80	18	28,7	17,9	9 300	8 200	1,0	73,5	46,5	50,3	0,36



## High temperature series HT200 / HT200ZZ

Ref.	Dimensions (mm)			Basic loading rate (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max	Da max	da min	da max	(Kg)	(lbs)
6004HT200	20	42	12	9,2	5,0	-	7700	0,6	38,0	24,0	27,5	0,07	0,15
6008HT200	40	68	15	16,4	11,5	-	4400	1,0	63,0	45,0	48,9	0,19	0,42
6204HT200	20	47	14	12,6	6,6	-	7100	1,0	42,0	25,0	25,9	0,11	0,24
6205HT200	25	52	15	13,8	7,9	-	6100	1,0	47,0	30,0	31,8	0,13	0,28
6206HT200	30	62	16	19,2	11,3	-	5200	1,0	57,0	35,0	37,9	0,20	0,44
6207HT200	35	72	17	25,3	15,3	-	4400	1,0	65,5	41,5	44,0	0,29	0,63
6208HT200	40	80	18	28,7	17,9	-	3900	1,0	73,5	46,5	50,3	0,36	0,80
6201HT200ZZ	12	32	10	6,8	3,1	22000	11000	0,6	28,0	16,0	18,3	0,04	0,08
6202HT200ZZ	15	35	11	7,7	3,75	20000	9400	0,6	31,0	19,0	21,1	0,05	0,10
6203HT200ZZ	17	40	12	9,4	4,75	18000	8400	0,6	36,0	21,0	24,1	0,07	0,15
6204HT200ZZ	20	47	14	12,6	6,6	16000	7100	1,0	42,0	25,0	25,9	0,11	0,24
6205HT200ZZ	25	52	15	13,8	7,9	14000	6100	1,0	47,0	30,0	31,8	0,13	0,28
6206HT200ZZ	30	62	16	19,2	11,3	12000	5200	1,0	57,0	35,0	37,9	0,20	0,44
6207HT200ZZ	35	72	17	25,3	15,3	10000	4400	1,0	65,5	41,5	44,0	0,29	0,63
6208HT200ZZ	40	80	18	28,7	17,9	9300	3900	1,0	73,5	46,5	50,3	0,36	0,80



## Low temperature series LT / LTZZ

Ref.	Dimensions (mm)			Basic loading rate (kN)		Speed (rpm)		Shoulders and fillets (mm)				Weight	
	d	D	B	Cr	Cor	Thermal reference	Limiting speed	ra max	Da max	da min	da max	(Kg)	(lbs)
6002LT	15	32	9	5,4	2,9	-	14 000	0,3	30,0	17,0	20,5	0,03	0,07
6003LT	17	35	10	5,8	3,3	-	13 000	0,3	33,0	19,0	22,8	0,04	0,09
6004LT	20	42	12	9,2	5,0	-	10 000	0,6	38,0	24,0	27,5	0,07	0,15
6005LT	25	47	12	9,8	5,8	-	9 100	0,6	43,0	29,0	31,6	0,08	0,17
6006LT	30	55	13	13,0	8,3	-	7 500	1,0	50,0	35,0	38,2	0,12	0,26
6200LT	10	30	9	5,9	2,6	-	18 000	0,6	26,0	14,0	16,0	0,03	0,07
6202LT	10	30	9	7,7	3,8	-	14 000	0,6	31,0	19,0	21,1	0,05	0,10
6203LT	17	40	12	9,4	4,8	-	12 000	0,6	36,0	21,0	24,1	0,07	0,15
6204LT	20	47	14	12,6	6,6	-	11 000	1,0	42,0	25,0	25,9	0,11	0,24
6205LT	25	52	15	13,8	7,9	-	9 000	1,0	47,0	30,0	31,8	0,13	0,28
6206LT	30	62	16	19,2	11,3	-	7 600	1,0	57,0	35,0	37,9	0,20	0,44
6003LTZZ	17	35	10	5,8	3,3	20 000	15 000	0,3	33,0	19,0	22,8	0,04	0,09
6004LTZZ	20	42	12	9,2	5,0	18 000	13 000	0,6	38,0	24,0	27,5	0,07	0,15
6005LTZZ	25	47	12	9,8	5,8	15 000	11 000	0,6	43,0	29,0	31,6	0,08	0,17
6006LTZZ	30	55	13	13,0	8,3	13 000	9 300	1,0	50,0	35,0	38,2	0,12	0,26
6007LTZZ	35	62	14	15,7	10,3	12 000	8 100	1,0	57,0	40,0	43,5	0,15	0,34
6200LTZZ	10	30	9	5,9	2,6	23 000	20 000	0,6	26,0	14,0	16,0	0,03	0,07
6204LTZZ	20	47	14	12,6	6,6	16 000	12 000	1,0	42,0	25,0	25,9	0,11	0,24
6205LTZZ	25	52	15	13,8	7,9	14 000	10 000	1,0	47,0	30,0	31,8	0,13	0,28
6206LTZZ	30	62	16	19,2	11,3	12 000	8 600	1,0	57,0	35,0	37,9	0,20	0,44



## Very high temperature series F6xx

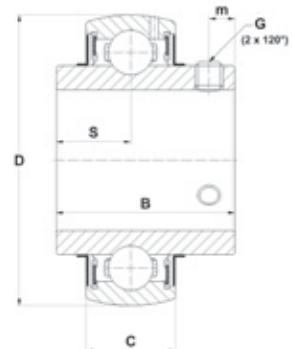
Ref.	Dimensions (mm)			Limiting speed	Shoulders and fillets (mm)			Weight		Recommended maximum permissible load (kN) per bearing - Speed < 50 rpm								Quantity of lubricant (g)
	d	D	B		ra max	Da max	da min	(Kg)	(lbs)	Idler (2 bearings per wheel)				Axle on 2 bearings				
										200°	250°	300°	350°	200°	250°	300°	350°	
6004F	20	42	12	50	0,6	38,0	24,0	0,07	0,15	1,7	1,5	1,3	1,0	2,4	2,3	2,0	1,6	0,6
6007F	35	62	14	50	1,0	57,0	40,0	0,15	0,33	3,4	3,1	2,6	2,1	4,9	4,6	4,1	3,3	1,3
6008F	40	68	15	50	1,0	63,0	45,0	0,19	0,41	3,8	3,5	2,9	2,3	5,5	5,2	4,6	3,7	1,7
6204F	20	47	14	50	1,0	42,0	25,0	0,10	0,23	2,2	2,0	1,7	1,3	3,2	3,0	2,6	2,1	0,9
6205F	25	52	15	50	1,0	47,0	30,0	0,13	0,28	2,6	2,4	2,0	1,6	3,8	3,6	3,2	2,5	1,1
6206F	30	62	16	50	1,0	57,0	35,0	0,19	0,43	3,7	3,4	2,8	2,3	5,4	5,1	4,5	3,6	1,7
6207F	35	72	17	50	1,0	65,5	41,5	0,27	0,60	5,0	4,6	3,8	3,1	7,3	6,9	6,1	4,9	2,4
6208F	40	80	18	50	1,0	73,5	46,5	0,35	0,78	5,9	5,4	4,5	3,6	8,6	8,1	7,2	5,7	3,2



# STAINLESS STEEL MOUNTED UNITS

## Insert bearing with locking screw (Suc) – LUBSOLID® compatible

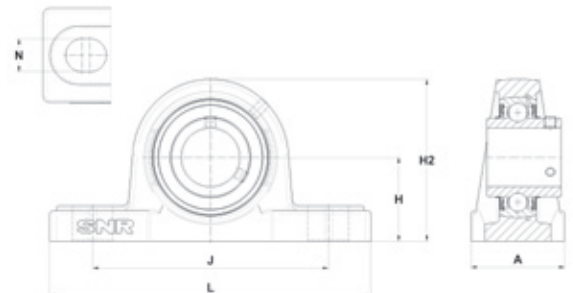
Ref.	Shaft diameter (mm)	Dimensions (mm)					Tightening screw G	Basic loading rate x1000 Newtons		Weight (Kg)
		D	B	C	S	m		C Dynamic	C0 Static	
SUC201	12	47	31,0	17	12,7	5,0	M6x1	10,1	6,8	0,21
SUC202	15	47	31,0	17	12,7	5,0	M6x1	10,1	6,8	0,19
SUC203	17	47	31,0	17	12,7	5,0	M6x1	10,1	6,8	0,18
<b>SUC204*</b>	<b>20</b>	<b>47</b>	<b>31,0</b>	<b>17</b>	<b>12,7</b>	<b>5,0</b>	<b>M6x1</b>	<b>10,1</b>	<b>6,8</b>	<b>0,16</b>
<b>SUC205*</b>	<b>25</b>	<b>52</b>	<b>34,1</b>	<b>17</b>	<b>14,3</b>	<b>5,0</b>	<b>M6x1</b>	<b>11,0</b>	<b>8,0</b>	<b>0,20</b>
<b>SUC206*</b>	<b>30</b>	<b>62</b>	<b>38,1</b>	<b>19</b>	<b>15,9</b>	<b>5,0</b>	<b>M6x1</b>	<b>15,3</b>	<b>11,5</b>	<b>0,32</b>
<b>SUC207*</b>	<b>35</b>	<b>72</b>	<b>42,9</b>	<b>20</b>	<b>17,5</b>	<b>6,0</b>	<b>M8x1</b>	<b>20,1</b>	<b>15,6</b>	<b>0,47</b>
<b>SUC208*</b>	<b>40</b>	<b>80</b>	<b>49,2</b>	<b>21</b>	<b>19,0</b>	<b>8,0</b>	<b>M8x1</b>	<b>22,8</b>	<b>18,2</b>	<b>0,63</b>
SUC209	45	85	49,2	22	19,0	8,0	M10x1,25	25,7	20,8	0,69
SUC210	50	90	51,6	24	19,0	10,0	M10x1,25	27,5	23,7	0,77
SUC211	55	100	55,6	25	22,2	10,0	M10x1,25	34,0	25,5	1,06
SUC212	60	110	65,1	27	25,4	10,0	M10x1,25	41,0	31,5	1,47



\*References in bold indicate that inserts exist in LUBSOLID® version - suffix FG1.  
 These dimensions are also available in zinc-plated version ZUC, refer to our e-Shop for more information.

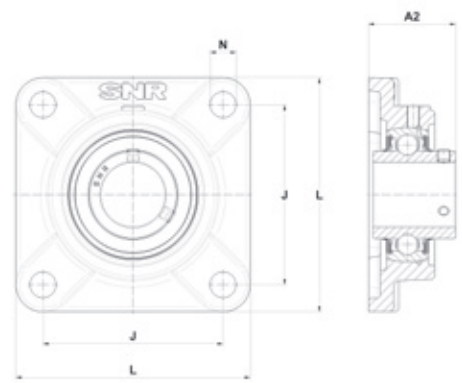
## With SUCP sole

Ref.	Shaft diameter (mm)	Dimensions (mm)						Weight (Kg)
		L	H	H2	J	A	N	
SUCP201	12	126	33,3	65	95	38	13	0,91
SUCP202	15	126	33,3	65	95	38	13	0,89
SUCP203	17	126	33,3	65	95	38	13	0,88
SUCP204	20	126	33,3	65	95	38	13	0,86
SUCP205	25	140	36,5	70	105	38	13	1,00
SUCP206	30	165	42,9	83	121	48	17	1,62
SUCP207	35	167	47,6	94	127	48	17	1,97
SUCP208	40	184	49,2	100	136	54	17	2,33
SUCP209	45	190	54,0	109	146	54	17	2,69
SUCP210	50	206	57,2	114	159	60	20	3,27
SUCP211	55	219	63,5	126	171	60	20	4,16
SUCP212	60	241	69,8	138	184	70	20	5,67



## Flange bearing with 4 holes SUCF

Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H2	J	A2	N	
SUCF201	12	86	-	64	33,3	12	0,61
SUCF202	15	86	-	64	33,3	12	0,59
SUCF203	17	86	-	64	33,3	12	0,58
SUCF204	20	86	-	64	33,3	12	0,56
SUCF205	25	95	-	70	35,8	12	0,80
SUCF206	30	108	-	83	40,2	12	1,12
SUCF207	35	116	-	92	44,4	14	1,37
SUCF208	40	130	-	102	51,2	16	1,83
SUCF209	45	137	-	105	52,2	16	2,29
SUCF210	50	143	-	111	54,6	16	2,57
SUCF211	55	162	-	130	58,4	19	4,06
SUCF212	60	175	-	143	68,7	19	5,47

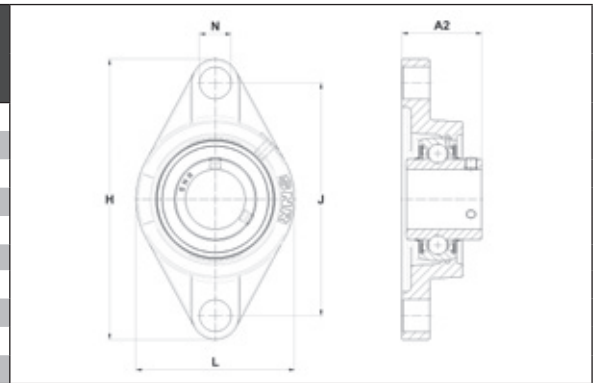


Bearing ranges are also available in inch sizes, refer to our e-Shop for more information.



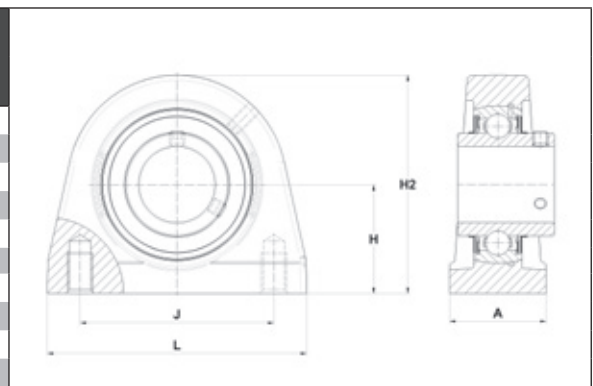
## Flange bearing with 2 holes SUCFL

Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H	J	A2	N	
SUCFL201	12	58,5	112	90	33,3	12,0	0,51
SUCFL202	15	58,5	112	90	33,3	12,0	0,49
SUCFL203	17	58,5	112	90	33,3	12,0	0,48
SUCFL204	20	58,5	112	90	33,3	12,0	0,46
SUCFL205	25	68,0	125	99	35,8	13,5	0,60
SUCFL206	30	80,0	141	117	40,2	13,5	0,92
SUCFL207	35	90,0	156	130	44,4	16,0	1,17
SUCFL208	40	100,0	172	144	51,2	16,0	1,53
SUCFL209	45	108,0	180	148	52,2	17,5	1,79
SUCFL210	50	115,0	190	157	54,6	17,5	2,17



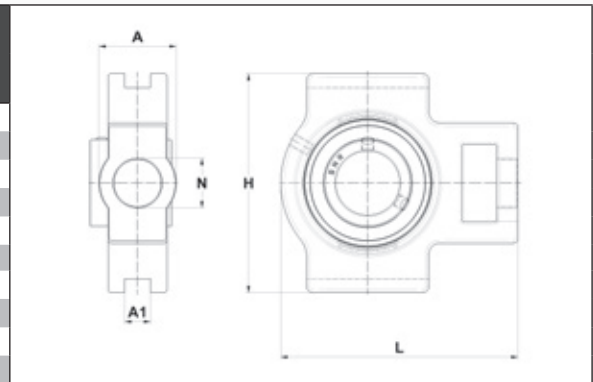
## With sole with blind holes SUCPA

Ref.	Shaft diameter (mm)	Dimensions (mm)					Screw thread	Weight (Kg)
		L	H	H2	J	A		
SUCPA201	12	73	33,3	65	50,8	38	M8	0,71
SUCPA202	15	73	33,3	65	50,8	38	M8	0,69
SUCPA203	17	73	33,3	65	50,8	38	M8	0,68
SUCPA204	20	73	33,3	65	50,8	38	M8	0,66
SUCPA205	25	76	36,5	71	50,8	38	M10	0,80
SUCPA206	30	102	42,9	86	76,2	38	M10	1,32
SUCPA207	35	108	47,6	95	82,6	48	M10	1,67
SUCPA208	40	117	49,2	100	89,0	48	M12	1,93
SUCPA209	45	127	54,0	108	95,3	51	M12	2,29
SUCPA210	50	140	57,2	117	101,6	51	M16	2,77



## Take-up pulleys SUCT

Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H	A1	A	N	
SUCT201	12	94	89	12	32	32	0,81
SUCT202	15	94	89	12	32	32	0,79
SUCT203	17	94	89	12	32	32	0,78
SUCT204	20	94	89	12	32	32	0,76
SUCT205	25	95	89	12	32	32	0,90
SUCT206	30	113	102	12	37	37	1,32
SUCT207	35	129	102	12	37	37	1,67
SUCT208	40	144	114	16	49	49	2,53
SUCT209	45	144	117	16	49	49	2,49
SUCT210	50	149	117	16	49	49	2,67



## Protective covers SCO/SCC

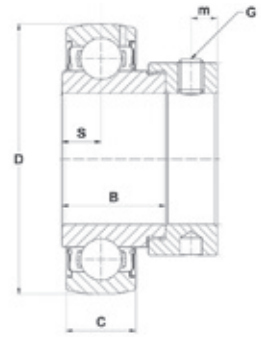
Ref.	Outer diameter (mm)		Height (mm)	Shaft diameter (mm)	Weight (Kg)	
	Open	Closed			Open	Closed
SCO201-12	SCO203	46	14,3	12	0,02	0,02
SCO202-15	SCO203	46	14,3	15	0,02	0,02
SCO203-17	SCO203	46	14,3	17	0,02	0,02
SCO204-20	SCO204	54	14,3	20	0,03	0,03
SCO205-25	SCO205	60	15,4	25	0,03	0,04
SCO206-30	SCO206	70	16,9	30	0,04	0,05
SCO207-35	SCO207	80	18,7	35	0,05	0,06
SCO208-40	SCO208	88	22,9	40	0,07	0,08
SCO209-45	SCO209	95	22,9	45	0,07	0,09
SCO210-50	SCO210	100	25,8	50	0,10	0,12
SCO211-55	SCO211	110	25,1	55	0,11	0,14
SCO212-60	SCO212	120	30,4	60	0,14	0,18



Mounted units must be ordered with the **N** suffix to fit with the use of end caps (ex : SUCT204N)

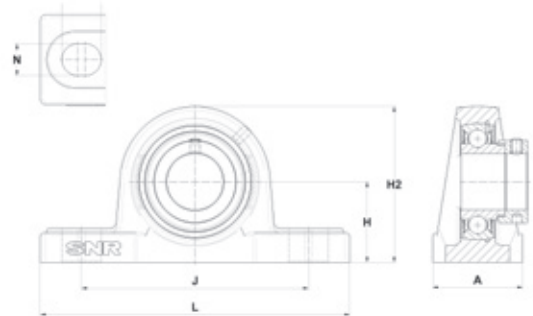
## Insert bearings with eccentric locking collar (SES)

Ref.	Shaft diameter (mm)	Dimensions (mm)					Tightening screw (G)	Basic loading rate x1000 Newtons		Weight (Kg)
		D	B	C	S	m		C Dynamic	C0 Static	
SESP204	20	47	21,5	14	7,0	5,0	M6x1	10,1	6,8	0,17
SESP205	25	52	21,5	15	7,5	5,0	M6x1	11,0	8,0	0,20
SESP206	30	62	23,8	16	8,0	6,0	M8x1	15,3	11,5	0,32
SESP207	35	72	25,4	17	8,5	6,5	M8x1	20,1	15,6	0,51
SESP208	40	80	30,2	18	9,0	6,5	M8x1	22,8	18,2	0,64
SESP209	45	85	30,2	19	9,5	6,5	M8x1	25,7	20,8	0,67
SESP210	50	90	30,2	20	10,0	6,5	M8x1	27,5	23,7	0,75
SESP211	55	100	32,5	21	10,5	8,0	M10x1,25	34,0	25,5	1,03
SESP212	60	110	37,1	22	11,0	8,0	M10x1,25	41,0	31,5	1,34



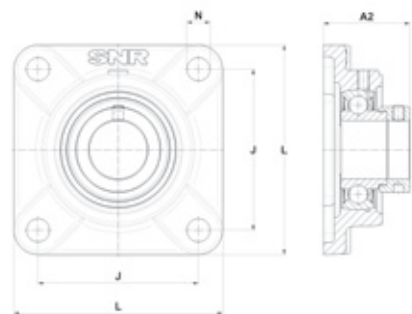
## With SESP sole

Ref.	Shaft diameter (mm)	Dimensions (mm)						Weight (Kg)
		L	H	H2	J	A	N	
SESP204	20	126	33,3	65	95	38	13	0,87
SESP205	25	140	36,5	70	105	38	13	1,00
SESP206	30	165	42,9	83	121	48	17	1,62
SESP207	35	167	47,6	94	127	48	17	2,01
SESP208	40	184	49,2	100	136	54	17	2,34
SESP209	45	190	54,0	109	146	54	17	2,67
SESP210	50	206	57,2	114	159	60	20	3,25
SESP211	55	219	63,5	126	171	60	20	4,13
SESP212	60	241	69,8	138	184	70	20	5,54



## Flange bearing with 4 holes SESF

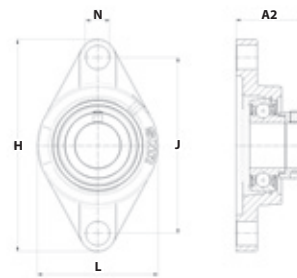
Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H2	J	A2	N	
SESF204	20	86	-	64	39,0	12	0,57
SESF205	25	95	-	70	39,5	12	0,80
SESF206	30	108	-	83	45,7	12	1,12
SESF207	35	116	-	92	49,4	14	1,41
SESF208	40	130	-	102	55,7	16	1,84
SESF209	45	137	-	105	56,2	16	2,27
SESF210	50	143	-	111	55,7	16	2,55
SESF211	55	162	-	130	62,9	19	4,03
SESF212	60	175	-	143	71,1	19	5,34



Bearing ranges are also available in inch sizes, refer to our e-Shop for more information.

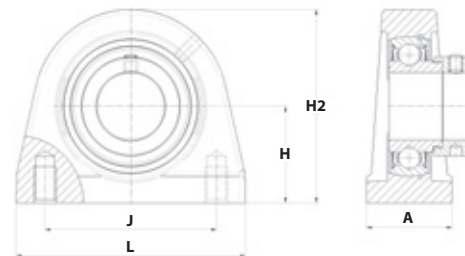
## Flange bearing with 2 holes SESFL

Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H	J	A2	N	
SESFL204	20	58,5	112	90	39,0	12,0	0,47
SESFL205	25	68,0	125	99	39,5	13,5	0,60
SESFL206	30	80,0	141	117	45,7	13,5	0,92
SESFL207	35	90,0	156	130	49,4	16,0	1,21
SESFL208	40	100,0	172	144	55,7	16,0	1,54
SESFL209	45	108,0	180	148	56,2	17,5	1,77
SESFL210	50	115,0	190	157	55,7	17,5	2,15



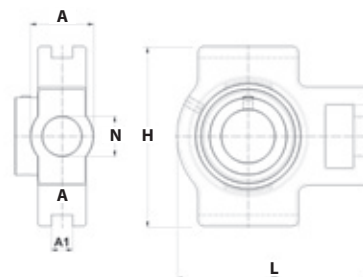
## With sole with blind holes SESPA

Ref.	Shaft diameter (mm)	Dimensions (mm)					Screw thread	Weight (Kg)
		L	H	H2	J	A		
SESPA204	20	73	33,3	65	50,8	38	M8	0,67
SESPA205	25	76	36,5	71	50,8	38	M10	0,80
SESPA206	30	102	42,9	86	76,2	38	M10	1,32
SESPA207	35	108	47,6	95	82,6	48	M10	1,71
SESPA208	40	117	49,2	100	89,0	48	M12	1,94
SESPA209	45	127	54,0	108	95,3	51	M12	2,27
SESPA210	50	140	57,2	117	101,6	51	M16	2,75



## Take-up pulleys SEST

Ref.	Shaft diameter (mm)	Dimensions (mm)					Weight (Kg)
		L	H	A1	A	N	
SEST204	20	94	89	12	32	32	0,77
SEST205	25	95	89	12	32	32	0,90
SEST206	30	113	102	12	37	37	1,32
SEST207	35	129	102	12	37	37	1,71
SEST208	40	144	114	16	49	49	2,54
SEST209	45	144	117	16	49	49	2,47
SEST210	50	149	117	16	49	49	2,65



## Protective covers SCOE/SCCE

Ref.		Outer diameter (mm)	Height (mm)	Shaft diameter (mm)	Weight (Kg)	
Open	Closed				Open	Closed
SCOE203-17	SCCE203	46	21,0	17	0,03	0,03
SCOE204-20	SCCE204	54	23,5	20	0,04	0,04
SCOE205-25	SCCE205	60	24,0	25	0,04	0,05
SCOE206-30	SCCE206	70	26,0	30	0,05	0,06
SCOE207-35	SCCE207	80	28,0	35	0,06	0,07
SCOE208-40	SCCE208	88	29,0	40	0,07	0,09
SCOE209-45	SCCE209	95	30,0	45	0,08	0,10
SCOE210-50	SCCE210	100	33,5	50	0,11	0,14
SCOE211-55	SCCE211	110	38,5	55	0,14	0,17
SCOE212-60	SCCE212	120	41,0	60	0,16	0,20

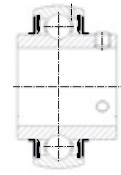


Mounted units must be ordered with the **N** suffix to fit with the use of end caps (ex : SEST204N)

# THERMOPLASTIC MOUNTED UNITS

## Insert bearings with locking screw (MUC) – LUBSOLID® compatible

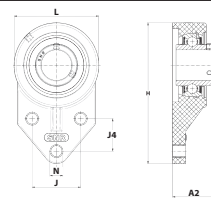
Ref.	Shaft diameter (mm)	Dimensions (mm)						Tightening screw G	Basic loading rate x 1000 Newtons		Weight (Kg)
		D	B	C	S	m	r		C Dynamic	Co Static	
MUC204FD	20	47	31,0	17	12,7	4,5	1,5	M6x1	10,9	5,3	0,15
MUC205FD	25	52	34,1	17	14,3	5,0	1,5	M6x1	11,9	6,3	0,19
MUC206FD	30	62	38,1	19	15,9	5,0	1,5	M6x1	16,7	9,0	0,31
MUC207FD	35	72	42,9	20	17,5	6,0	2,0	M8x1	22,0	12,3	0,48
MUC208FD	40	80	49,2	21	19,0	8,0	2,0	M8x1	24,9	14,3	0,62



To use LUBSOLID® inserts in the thermoplastic bearings, order SUC inserts with the suffix FG1 (see page 24).

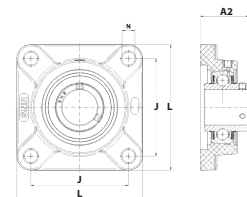
## Flange bearing with 3 holes MUCFBL

Ref.	Shaft diameter (mm)	L	H	J	J4	A2	N	Weight (Kg)
MUCFBL204	20	63,5	108,0	38,1	22,2	33,7	10,7	0,25
MUCFBL205	25	70,0	120,6	41,3	28,6	41,6	10,7	0,30
MUCFBL206	30	83,0	138,5	47,6	31,8	41,5	10,7	0,46
MUCFBL207	35	95,0	157,0	50,8	31,8	47,1	13,1	0,66
MUCFBL208	40	99,0	158,5	50,8	31,8	51,7	13,1	0,85



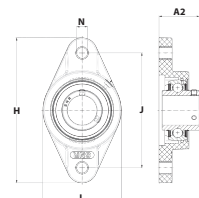
## Flange bearing with 4 holes MUCFPL

Ref.	Shaft diameter (mm)	L	H2	J	A2	N	Weight (Kg)
MUCFPL204	20	86	-	63,5	36,3	11	0,29
MUCFPL205	25	95	-	70	36,8	11	0,36
MUCFPL206	30	107	-	83	41,4	11	0,50
MUCFPL207	35	118	-	92	46,9	13	0,74
MUCFPL208	40	130	-	102	53,2	14	0,97



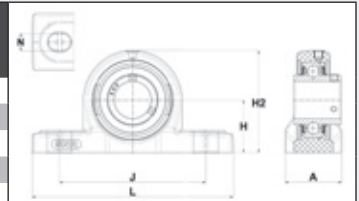
## Flange bearing with 2 holes MUCNFL

Ref.	Shaft diameter (mm)	L	H	J	A2	N	Weight (Kg)
MUCNFL204	20	64,8	113	90	33,7	11	0,24
MUCNFL205	25	70,0	130	99	36,8	11	0,30
MUCNFL206	30	80,0	148	117	41,2	11	0,45
MUCNFL207	35	90,0	163	130	43,4	13	0,66
MUCNFL208	40	100,0	175	144	51,7	14	0,87



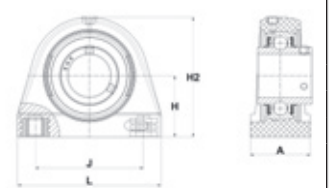
## With sole MUCPPL

Ref.	Shaft diameter (mm)	L	H	H2	J	A	N	Weight (Kg)
MUCPPL204	20	127	33,3	65	95	38	11	0,29
MUCPPL205	25	140	36,5	71	105	38	11	0,34
MUCPPL206	30	162	42,9	83	119	46	14	0,54
MUCPPL207	35	167	47,6	94	127	48	14	0,78
MUCPPL208	40	184	49,2	98	137	54	14	0,97




## With sole with blind holes MUCTBL

Ref.	Shaft diameter (mm)	L	H	H2	J	A	Screw thread	Weight (kg)
MUCTBL204	20	72,8	33,3	66,0	50,8	34,5	M8	0,24
MUCTBL205	25	76,2	36,5	73,5	50,8	39,5	M10	0,31
MUCTBL206	30	101,0	42,9	84,0	76,2	42,5	M10	0,50
MUCTBL207	35	110,0	47,6	95,0	82,6	47,5	M10	0,73
MUCTBL208	40	120,0	49,2	110,5	88,9	48,0	M12	0,90



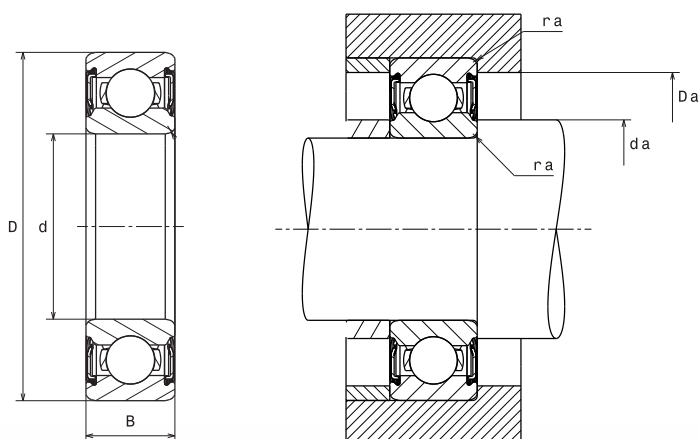
## CV/CF protective covers

Ref.		Outer diameter (mm)	Height (mm)	Shaft diameter (mm)	Weight (Kg)	
Open	Closed				Open	Closed
CV204	CF204	50,1	23	20	0,02	0,01
CV205	CF205	55,0	25	25	0,03	0,02
CV206	CF206	64,0	30	30	0,03	0,02
CV207	CF207	74,5	32	35	0,04	0,03
CV 208	CF208	84,0	37	40	0,05	0,03




Bearing ranges are also available in inch sizes, refer to our e-Shop for more information.

## STAINLESS STEEL BALL BEARINGS



### SEALED VERSION

Ref.	Dimensions (mm)			Basic loading rate (kN)		Speed (rpm)	Shoulders and fillets (mm)				Weight (Kg)
	d	D	B	Cr	Co		Limiting speed mécanique	ra max	Da max	da min	
S60002RSD136	10	26	8	4,5	1,97	22000	0,3	24,0	12,0	12,8	0,02
S60012RSD136	12	28	8	5,1	2,39	18000	0,3	26,0	14,0	16,3	0,02
S60022RSD136	15	32	9	5,5	2,85	15000	0,3	30,0	17,0	19,3	0,03
S60032RSD136	17	35	10	5,9	3,30	13000	0,3	33,0	19,0	21,3	0,04
S60042RSD136	20	42	12	9,3	5,10	11000	0,6	38,0	24,0	25,0	0,07
S60052RSD136	25	47	12	9,9	5,90	9500	0,6	43,0	29,0	30,0	0,08
S60062RSD136	30	55	13	13,1	8,30	7900	1,0	50,0	35,0	36,4	0,12
S60072RSD136	35	62	14	15,7	10,30	6800	1,0	57,0	40,0	41,9	0,16
S60082RSD136	40	68	15	16,5	11,50	6100	1,0	63,0	45,0	46,8	0,19
S62002RSD136	10	30	9	5,1	2,39	18000	0,6	26,0	14,0	15,6	0,03
S62012RSD136	12	32	10	6,1	2,80	16000	0,6	28,0	16,0	17,6	0,04
S62022RSD136	15	35	11	7,6	3,75	15000	0,6	31,0	19,0	19,7	0,05
S62032RSD136	17	40	12	9,5	4,80	13000	0,6	36,0	21,0	22,7	0,07
S62042RSD136	20	47	14	12,7	6,70	10000	1,0	42,0	25,0	27,5	0,11
S62052RSD136	25	52	15	13,9	7,90	9000	1,0	47,0	30,0	31,8	0,13
S62062RSD136	30	62	16	19,3	11,30	7400	1,0	57,0	35,0	38,8	0,20
S62072RSD136	35	72	17	25,5	15,40	6400	1,0	65,5	41,5	44,8	0,28
S62082RSD136	40	80	18	28,8	17,90	5700	1,0	73,5	46,5	50,6	0,37
S63002RSD136	10	35	11	8,1	3,45	16000	0,6	31,0	14,0	18,0	0,05
S63012RSD136	12	37	12	9,7	4,20	16000	1,0	32,0	17,0	17,9	0,06
S63022RSD136	15	42	13	11,4	5,40	13000	1,0	37,0	20,0	22,5	0,08
S63032RSD136	17	47	14	13,6	6,60	11000	1,0	42,0	22,0	25,0	0,12
S63042RSD136	20	52	15	15,9	7,90	10000	1,0	45,5	26,5	27,8	0,14
S63052RSD136	25	62	17	20,4	11,3	8400	1,0	55,5	31,5	34,0	0,23

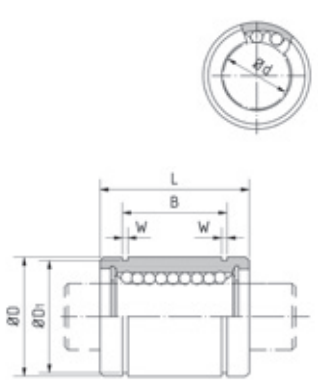


# LINEAR MOTION

## STAINLESS STEEL LINEAR BUSHINGS BBES

### Closed

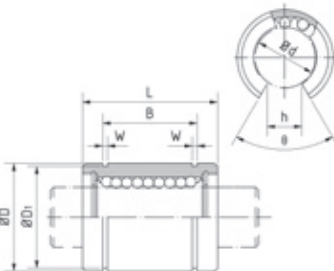
Plastic cage	Stainless steel cage	Ød	ØD	L	B	W	ØD1	Number of rows of balls
BBES3	BBES3A	3	7	10	-	-	-	4
BBES4	BBES4A	4	8	12	-	-	-	4
BBES5	BBES5A	5	12	22	14,5	1,10	11,5	4
BBES8	BBES8A	8	16	25	16,5	1,10	15,2	4
BBES10	BBES10A	10	19	29	22,0	1,30	18,0	4
BBES12	BBES12A	12	22	32	22,9	1,30	21,0	4
BBES16	BBES16A	16	26	36	24,9	1,30	24,9	4
BBES20	BBES20A	20	32	45	31,5	1,60	30,3	5
BBES25	BBES25A	25	40	58	44,1	1,85	37,5	6
BBES30	BBES30A	30	47	68	52,1	1,85	44,5	6
BBES40	BBES40A	40	62	80	60,6	2,15	59,0	6
BBES50	BBES50A	50	75	100	77,6	2,65	72,0	6
BBES60	BBES60A	60	90	125	101,7	3,15	86,5	6



Also available in JIS version (Asian standard in metric dimensions).  
Refer to our "Ball Bushings" catalogue to discover the entire range.

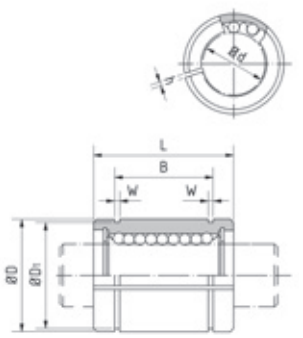
### Open

Plastic cage	Stainless steel cage	Ød	ØD	L	B	W	ØD1	h	Number of rows of balls
BBES12-OP	BBES12A-OP	12	22	32	22,9	1,30	21,0	7,5	3
BBES16-OP	BBES16A-OP	16	26	36	24,9	1,30	24,9	10,0	3
BBES20-OP	BBES20A-OP	20	32	45	31,5	1,60	30,3	10,0	4
BBES25-OP	BBES25A-OP	25	40	58	44,1	1,85	37,5	12,5	5
BBES30-OP	BBES30A-OP	30	47	68	52,1	1,85	44,5	12,5	5
BBES40-OP	BBES40A-OP	40	62	80	60,6	2,15	59,0	16,8	5
BBES50-OP	BBES50A-OP	50	75	100	77,6	2,65	72,0	21,0	5
BBES60-OP	BBES60A-OP	60	90	125	101,7	3,15	86,5	27,2	5



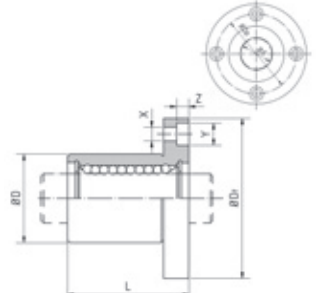
### Adjustable

Plastic cage	Stainless steel cage	Ød	ØD	L	B	W	ØD1	h	Number of rows of balls
BBES5-AJ	X	5	12	22	14,5	1,10	11,5	1,0	4
BBES8-AJ	X	8	16	25	16,5	1,10	15,2	1,0	4
BBES10-AJ	X	10	19	29	22,0	1,30	18,0	1,0	4
BBES12A-AJ	BBES12A-AJ	12	22	32	22,9	1,30	21,0	1,5	4
BBES16A-AJ	BBES16A-AJ	16	26	36	24,9	1,30	24,9	1,5	4
BBES20A-AJ	BBES20A-AJ	20	32	45	31,5	1,60	30,0	2,0	5
BBES25A-AJ	BBES25A-AJ	25	40	58	44,1	1,85	37,5	2,0	6
BBES30A-AJ	BBES30A-AJ	30	47	68	52,1	1,85	44,5	2,0	6
BBES40A-AJ	BBES40A-AJ	40	62	80	60,6	2,15	59,0	2,0	6
BBES50A-AJ	BBES50A-AJ	50	75	100	77,6	2,65	72,0	2,0	6
BBES60A-AJ	BBES60A-AJ	60	90	125	101,7	3,15	86,5	2,0	6



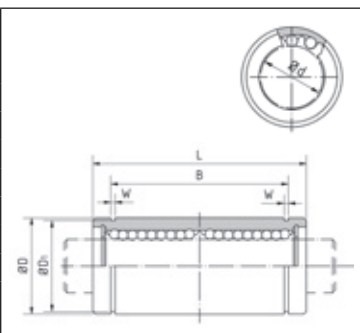
### Flanged ball bushings (round)

Plastic cage	Stainless steel cage	Ød	ØD	L	ØDf	X	Y	Z	Number of rows of balls
BBERS8	BBERS8A	8	16	25	24	3,5	6,0	3,1	4
BBERS12	BBERS12A	12	22	32	32	4,5	7,5	4,1	4
BBERS16	BBERS16A	16	26	36	36	4,5	7,5	4,1	4
BBERS20	BBERS20A	20	32	45	43	5,5	9,0	5,1	5
BBERS25	BBERS25A	25	40	58	51	5,5	9,0	5,1	6
BBERS30	BBERS30A	30	47	68	62	6,6	11,0	6,1	6
BBERS40	BBERS40A	40	62	80	80	9,0	14,0	8,1	6
BBERS50	BBERS50A	50	75	100	94	9,0	14,0	8,1	6
BBERS60	BBERS60A	60	90	125	112	11,0	17,0	11,1	6



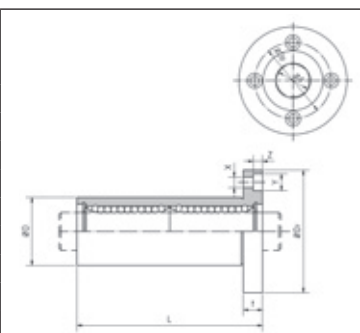
## Tandem

Plastic cage	Stainless steel cage	Ød	ØD	L	B	W	ØD1	Number of rows of balls
BBES8L	BBES8LA	8	16	46	33,0	1,10	15,2	4
BBES12L	BBES12LA	12	22	61	45,8	1,30	21,0	4
BBES16L	BBES16LA	16	26	68	49,8	1,30	24,9	4
BBES20L	BBES20LA	20	32	80	61,0	1,60	30,3	5
BBES25L	BBES25LA	25	40	112	82,0	1,85	37,5	6
BBES30L	BBES30LA	30	47	123	104,2	1,85	44,5	6
BBES40L	BBES40LA	40	62	151	121,2	2,15	59,0	6
BBES50L	BBES50LA	50	75	192	155,2	2,65	72,0	6
BBES60L	BBES60LA	60	90	209	170,0	3,15	86,5	6



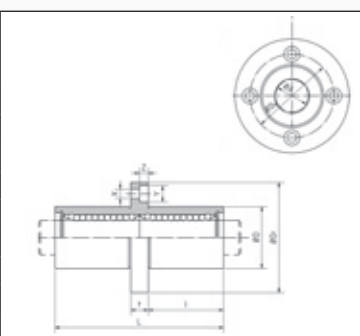
## Tandem flanged ball bushings (round)

Plastic cage	Stainless steel cage	Ød	ØD	L	ØDf	T	ØDP	X	Y	Z	Number of rows of balls
BBERS8L	BBERS8LA	8	16	46	32	5	24,0	3,5	6,0	3,1	4
BBERS12L	BBERS12LA	12	22	61	42	6	32,0	4,5	7,5	4,1	4
BBERS16L	BBERS16LA	16	26	68	46	6	36,0	4,5	7,5	4,1	4
BBERS20L	BBERS20LA	20	32	80	54	8	43,0	5,5	9,0	5,1	5
BBERS25L	BBERS25LA	25	40	112	62	8	51,0	5,5	9,0	5,1	6
BBERS30L	BBERS30LA	30	47	123	76	10	62,0	6,6	11,0	6,1	6
BBERS40L	BBERS40LA	40	62	151	98	13	80,0	9,0	14,0	8,1	6
BBERS50L	BBERS50LA	50	75	192	112	13	94,0	9,0	14,0	8,1	6
BBERS60L	BBERS60LA	60	90	209	134	18	112,0	11,0	17,0	11,1	6



## Middle flanged ball bushings (round)

Plastic cage	Stainless steel cage	Ød	ØD	L	ØDf	T	ØDP	X	Y	Z	Number of rows of balls
BBERMS8	BBERMS8A	8	16	46	32	5	24	3,5	6,0	3,1	4
BBERMS12	BBERMS12A	12	22	61	42	6	32	4,5	7,5	4,1	4
BBERMS16	BBERMS16A	16	26	68	46	6	36	4,5	7,5	4,1	4
BBERMS20	BBERMS20A	20	32	80	54	8	43	5,5	9,0	5,1	5
BBERMS25	BBERMS25A	25	40	112	62	8	51	5,5	9,0	5,1	6
BBERMS30	BBERMS30A	30	47	123	76	10	62	6,6	11,0	6,1	6
BBERMS40	BBERMS40A	40	62	151	98	13	80	9,0	14,0	8,1	6
BBERMS50	BBERMS50A	50	75	192	112	13	94	9,0	14,0	8,1	6
BBERMS60	BBERMS60A	60	90	209	134	18	112	11,0	17,0	11,1	6

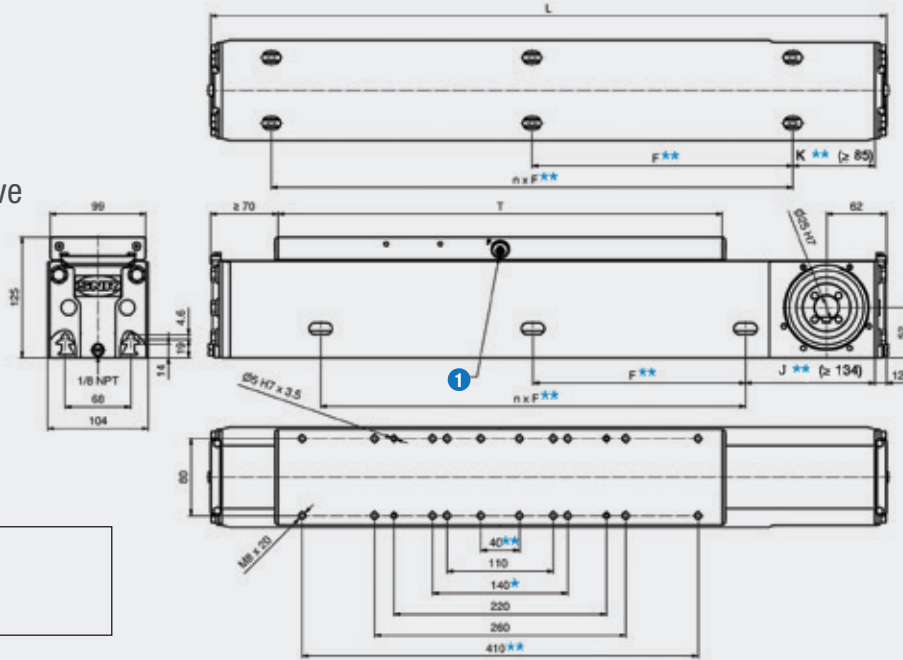


# LINEAR MOTION

## LINEAR MODULES

### AXF100Z

with toothed belt drive



T = Table length  
 S = Stroke  
 L = T + S + 140 mm

① Possibility of regreasing both sides

\*Guidance system B, D, P  
 \*\*Guidance system C  
 \*\*\*Optional: Special measurements to be specified

### Technical data

Type	Unit	Guidance system B	Guidance system C	Guidance system D	Polymer roller guidance P
Table length	mm	320	460	320	
Drive element		Toothed belt 40STD8			
Maximum speed	m/min	300			420
Allowable dynamic operation load	N	1 800			
Stroke length per revolution	mm	264 <sup>+0,5</sup>			
Idling speed torque	Nm	3,1			
Maximum drive torque	Nm	75,7			
Moment of inertia	Kg/cm <sup>2</sup>	14,3			
Geometrical moment of inertia (profile) I <sub>y</sub>	cm <sup>4</sup>	381,3			
Geometrical moment of inertia (profile) I <sub>z</sub>	cm <sup>4</sup>	514,0			
Max total length <sup>1</sup>	m	6,0			
Repeatability	mm	0,05			

<sup>1</sup> - Greater length possible on request

### Static load capacities

Type	Guidance system	Load [N]		Load moment [Nm]		
		F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
AXF100Z	B	11 200	16 500	175,0	900,0	560,0
	C	11 200	16 500	175,0	2 100,0	1 260,0
	D	23 750	23 750	680,0	1 100,0	1 100,0
	P	180	360	13,5	19,5	10,0

### Dynamic load capacities

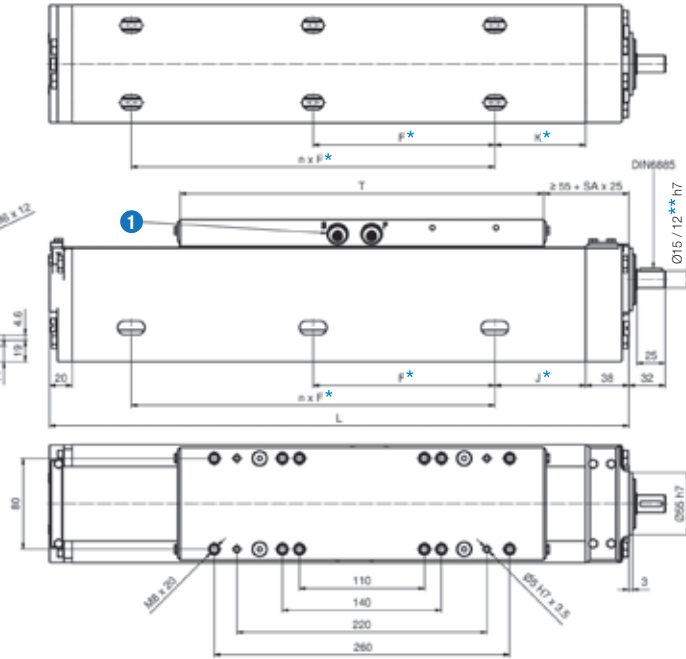
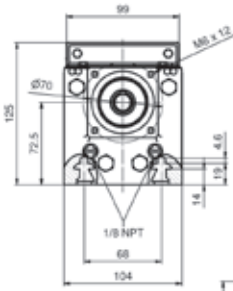
The dynamic load capacities of the guiding systems are based on a nominal life time of 50 000 km for the guiding systems B, C and D and 10 000 km for the guiding system P.

Type	Guidance system	Load [N]		Load moment [Nm]		
		F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
AXF100Z	B	5 000	5 000	52	275	275
	C	5 000	5 000	52	630	630
	D	7 000	7 000	200	325	325
	P	120	240	9,0	13,0	6,5

For a tailor-made design that perfectly matches your requirements, please refer to our "Linear Modules" catalogue and contact your sales representative.



## LINEAR MODULES AXF100S/AXF100T/AXF100G with screw drive



T = Table length  
S = Stroke  
n x SA = Number of screw drive support units  
L = T + S + 80 mm (+ n x SA x 50 mm)

① Possibility of regreasing both sides

\*Optional: Special measurements to be specified  
\*\*For drive system G and T

### Technical data

Type	Unit	SN2505	SN2510	SN2525	SN2550
Guiding system		Guidance system D			
Table length T	mm	320			
Drive element		Ball screw			
Screw diameter	mm	25			
Pitch/Pitch direction	mm	5/right	10/right	25/right	50/right
Maximum velocity	m/min	24	48	120	150
Pitch accuracy	µm/300 mm	52			
Dynamic load capacity of the ball screw	N	19 800	16 100	12 100	15 400
Idling speed torque	Nm	0,3...2,0			
Maximum drive torque	Nm	5,2	10,0	27,0	50,0
Maximum axial operating load	N	6 000			
Moment of inertia	Kg cm <sup>2</sup> /m	2,62	2,82	2,62	2,25
Geometrical moment of inertia (profile) I <sub>y</sub>	cm <sup>4</sup>	338,7			
Geometrical moment of inertia (profile) I <sub>z</sub>	cm <sup>4</sup>	411,8			
Maximum total length	m	5,8		6,0	
Repeatability	mm	0,03			
Efficiency		0,93	0,98		

For detailed data about AXF100T (with trapezoidal screw) and AXF100G (with sliding screw) refer to our "Linear axis" catalogue.

### Static load capacities

Type	Guidance system	Load [N]		Load moment [Nm]		
		F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
AXF100S AXF100T AXF100G	D	15 900	15 900	450,0	1 600,0	1 600,0
	P	180	360	13,5	19,5	10,0

### Dynamic load capacities


The dynamic load capacities of the guiding systems are based on a nominal life time of 25 000 km for the guiding systems B, C and D and 10 000 km for the guiding system P.

Type	Guidance system	Load [N]		Load moment [Nm]		
		F <sub>y</sub>	F <sub>z</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
AXF100S AXF100T AXF100G	D	5 850	5 850	170	600	600
	P	120	240	9,0	13,0	6,5


For a tailor-made design that perfectly matches your requirements, please refer to our "Linear Modules" catalogue and contact your sales representative.

# LUBRICATION SOLUTIONS

## Lubricants in cartridges or containers


Lubricant	Reference	Quantity	
	Food all	lub food AL grease / C400G	Cartridge 400 g
		lub food AL grease / B1Kg	Container 1 kg
	Ultra high temperature	temp grease / 800G	800 g

## Single-point lubrication systems

Lubrication system	Reference	Quantity	Lubricant	
			Food	Food chain oil
Ready 	luber ready 60 food	60 cc	X	
	luber ready food	125 cc	X	
	luber ready food chain oil	125 cc		X
Smart 	luber smart 125 chain oil	125 cc		X
	luber smart 125 food	125 cc	X	
Drive 	luber drive kit 120-food	120 cc	X	
	luber drive kit 250-food	250 cc	X	
Refills	luber drive refill 120 food	120 cc	X	
	luber drive refill 150 food	150 cc	X	
	luber smart refill 125 food	125 cc	X	
	luber smart refill 125 chain oil	125 cc		X



## Multi-point lubrication system

PUMP	Reference	Number of outlets	
 <p><b>Standard POLIPUMP</b> Can be used for industrial applications</p>	12 VDC	POLIPUMP-2KG-12 PUM-12VDC-IND._0888270	12
		POLIPUMP-2KG-24 PUM-12VDC-IND._0888271	24
		POLIPUMP-2KG-35 PUM-12VDC-IND._0888272	35
	24 VDC	POLIPUMP-2KG-12 PUM-24VDC-IND._0888273	12
		POLIPUMP-2KG-24 PUM-24VDC-IND._0888274	24
		POLIPUMP-2KG-35 PUM-24VDC-IND._0888275	35





# SOLUTIONS FOR THE **FOOD-PROCESSING INDUSTRY**

The complete offer for optimal and risk-free production



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