



SELF-ALIGNING BEARING UNITS

Accessible quality



www.ntn-snr.com



With You

INNOVATION DRIVING YOUR PRODUCTION

Movement is constantly changing. It is analysed, brought under control, guided and mastered with the aim of deriving maximum benefit. It is more than a simple concept. It is the very essence of our commitment, namely designing and innovating to deliver the perfect solutions to the issues and constraints of today and tomorrow.

There are thousands of us around the world masterminding and developing solutions to raise the bar on your production performance. Our world-leading brands (NTN, BCA, BOWER and SNR) are marketed worldwide and deliver the best-fit solutions for working together and building a more environmentally-friendly society. Follow our lead and use interaction, anticipation and adaptation as the keys to guiding and shaping the future of the manufacturing, automotive and aviation markets.

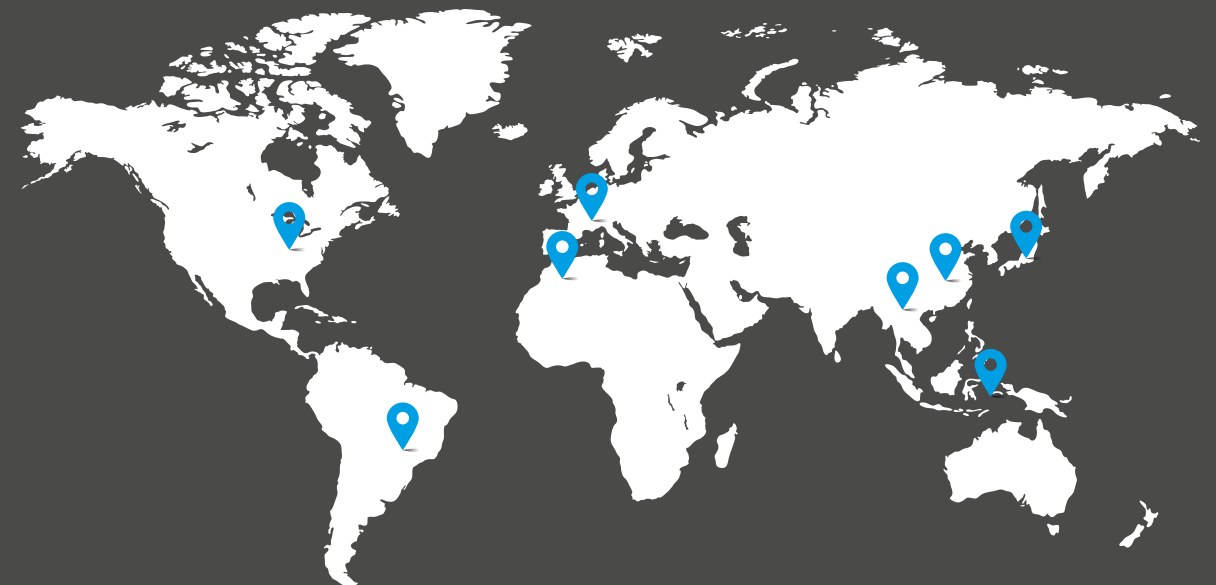
5,4 BILLION €

in revenue in 2019

24 199

employees in 2019

The local service of an international partner



118

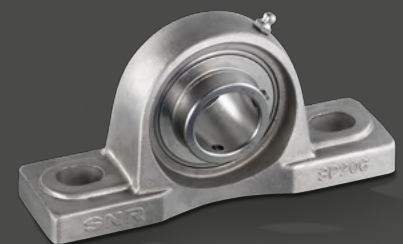
sales offices

73

production sites

15

R&D centres



CAST IRON HOUSINGS WITH CHROME STEEL BEARING INSERTS

HOUSINGS	BEARING INSERTS							Suitable protective covers for combination with (available for shaft-Ø 12-65mm)*	
		UC2..G2 / UC3..G2	US2..G2	EX2..G2 / EX3..G2	ES2..G2	LK2..G2H	UK2..G2H / UK3..G2H	UC2..G2 / US2..G2 / LK2..G2H / UK2..G2H	EX2..G2 / ES2..G2
Pillow blocks		UCPE2	USPE2	EXPE2	ESPE2	LKPE2+H	UKPE2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCPLE2	USPLE2	EXPLE2	ESPLE2	LKPLE2+H	UKPLE2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCP2 / UCP3	USP2	EXP2 / EXP3	ESP2	LKP2+H	UKP2+H / UKP3+H	SCC2 / SC02	SCCE2 / SCOE2
		UCPH2	USPH2	EXPH2	ESPH2	LKPH2+H	UKPH2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCPAE2	USPAE2	EXPAE2	ESPAE2	LKPAE2+H	UKPAE2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCPG2	USPG2	EXPG2	ESPG2	LKPG2+H	UKPG2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCPA2	USPA2	EXPA2	ESPA2	LKPA2+H	UKPA2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCFE2	USFE2	EXFE2	ESFE2	LKFE2+H	UKFE2+H	SCC2 / SC02	SCCE2 / SCOE2
Flanged Units		UCF2 / UCF3	USF2	EXF2 / EXF3	ESF2	LKF2+H	UKF2+H / UKF3+H	SCC2 / SC02	SCCE2 / SCOE2
		UCFCE2	USFCE2	EXFCE2	ESFCE2	LKFCE2+H	UKFCE2+H	-	-
		UCFC2	USFC2	EXFC2	ESFC	LKFC2+H	UKFC2+H	SCC2 / SC02	SCCE2 / SCOE2
		-	USFEE2	-	ESFEE	-	-	-	-
		-	USFTE2	-	ESFTE	-	-	-	-
		UCFLE2	USFLE2	EXFLE2	ESFLE2	LKFLE2+H	UKFLE2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCFL2 / UCFL3	USFL2	EXFL2 / EXFL3	ESFL2	LKFL2+H	UKFL2+H / UKFL3+H	SCC2 / SC02	SCCE2 / SCOE2
		UCFLZ2	USFLZ2	EXFLZ2	ESFLZ2	LKFLZ2+H	UKFLZ2+H	-	-
		-	USFD2	-	ESFD2	-	-	-	-
		-	USFAE2	-	ESFAE2	-	-	-	-
		UCFA2	USFA2	EXFA2	ESFA2	LKFA2+H	UKFA2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCFS3	-	EXFS3	-	-	UKFS3+H	-	-
		UCT2 / UCT3	UST2	EXT2 / EXT3	EST2	LKT2+H	UKT2+H / UKT3+H	SCC2 / SC02	SCCE2 / SCOE2
		UCT2+WB	UST2+WB	EXT2+WB	EST2+WB	LKT2+H+WB	UKT2+H+WB	SCC2 / SC02	SCCE2 / SCOE2
Tensioner- / Hang up- / Cartridge Units		UCSP2	USSP2	EXSP2	ESSP2	LKSP2+H	UKSP2+H	SCC2 / SC02	SCCE2 / SCOE2
		UCC2 / UCC3	USC2	EXC2 / EXC3	ESC2	LKC2+H	UKC2+H / UKC3+H	-	-
		UCEHE2	USEHE2	EXEHE2	ESEHE2	LKEHE2+H	UKEHE2+H	-	-

PRESSED STEEL HOUSINGS WITH CHROME STEEL BEARING INSERTS

HOUSINGS	BEARING INSERTS		
		US2..G2	ES2..G2
	PP2	USPP2	ESPP2
	PF2	USPF2	ESPF2
	PFL2	USPFL2	ESPFL2
	PFT2	USPFT2	ESPFT2
	PFE2	USPFE2	ESPFE2

STAINLESS STEEL HOUSINGS WITH STAINLESS STEEL BEARING INSERTS

HOUSINGS	BEARING INSERTS				Suitable protective covers for combination with (available for shaft-Ø 12-60mm)*	
		SUC2	SUC2..FG1**	SES2	SUC2 / SUC2..FG1**	SES2
	SP2	SUCP2	SUCP2..FG1	SESP2	SCC2 / SC02	SCCE2 / SCOE2
	SPA2	SUCPA2	SUCPA2..FG1	SESPA2	SCC2 / SC02	SCCE2 / SCOE2
	SF2	SUCF2	SUCF2..FG1	SESF2	SCC2 / SC02	SCCE2 / SCOE2
	SFL2	SUCFL2	SUCFL2..FG1	SESFL2	SCC2 / SC02	SCCE2 / SCOE2
	SFB2	SUCFB2	SUCFB2..FG1	SESB2	SCC2 / SC02	SCCE2 / SCOE2
	ST2	SUCT2	SUCT2..FG1	SEST2	SCC2 / SC02	SCCE2 / SCOE2

THERMOPLASTIC HOUSINGS WITH STAINLESS STEEL BEARING INSERTS

HOUSINGS	BEARING INSERTS			Suitable protective caps (available for shaft-Ø 15-40 mm)
		MUC2..FD	SUC2..FG1**	
	PPL2	MUCPPL2	SUCPPL2..FG1	CV2 / CF2
	TBL2	MUCTBL2	SUCTBL2..FG1	CV2 / CF2
	FPL2	MUCFPL2	SUCFPL2..FG1	CV2 / CF2
	NFL2	MUCNFL2	SUCNFL2..FG1	CV2 / CF2
	FBL2	MUCFBL2	SUCFBL2..FG1	CV2 / CF2

* The protective covers are fixed in housing grooves. For units that are to be fitted with protective covers, housings with suffix N must be ordered. Units already ordered with cover(s) are automatically delivered with grooved housings.

** LUBSOLID® filling





SELF-ALIGNING BEARING UNITS

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NTN® **SNR**®

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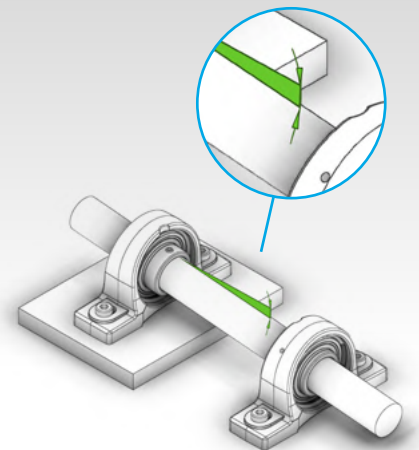
With You

GENERAL INFORMATION

OUR BEARING UNITS: INGENUOUSLY SIMPLE

A bearing unit consists of a ball bearing insert and a housing. The two components can easily be assembled together due to their spherically shaped bearing seats. The bearing inserts are angularly movable and compensate for slight static misalignment of the shaft.

Swivelling or tumbling motion must not act in dynamic operation.



Bearing units can cope with a high degree of mounting errors

G2 SYSTEM: THE UNIVERSAL SNR BEARING INSERT

All ball bearing inserts with suffix G2 are **equipped with four lubrication bores in two planes**. This re-lubrication system **allows reversed installation of inserts and can thus be used in either housing designs produced according to the JIS and ISO standard**.

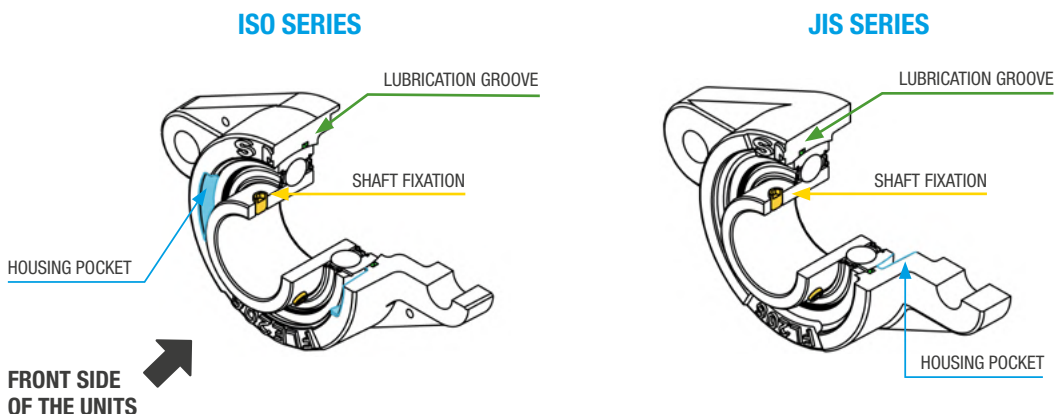
This system significantly **increases flexibility**, especially for those who prefer to keep single components in stock and pair them together when needed. This is a cost effective option, using fewer part numbers and saving warehouse space.



G2 System: Outer ring with four lubrication bores in two planes

EUROPEAN ISO VERSUS ASIAN JIS SERIES

The JIS and ISO manufactured bearing units only vary slightly in their dimensions. Some housing designs also have minor differences in shape. However, **the typical distinguishing feature is the arrangement of the lubrication groove on the bearing seat of the housing**. Therefore, **all SNR bearing inserts are equipped with G2 system to enable relubrication in both housing designs!**





SNR SELF-ALIGNING BEARING UNITS

ACCESSIBLE QUALITY!

Whether universal or industry-specific, the SNR range of self-aligning bearing units offers many solutions for bearing arrangements in industrial applications.

The portfolio comprises **more than 40,000 different part numbers**. Due to their **uncomplicated design**, the bearing units **can be mounted without special technical expertise**. The simple mounting and low-maintenance operation **ensure an economical rolling bearing solution**.

Housings in the SNR range are **available in a variety of materials**: cast iron, pressed steel, stainless steel and thermoplastic. All single-piece housings are **supplied with a re-greasing system to provide for lubrication of the bearing inserts**.

However, in many applications re-lubrication is not necessary due to inserts being based on greased for life deep groove ball bearings of series 62 and 63.

YOUR BENEFITS WITH SNR BEARING UNITS AT A GLANCE:

ONE STOP SHOP FOR ALL YOUR BEARING UNIT NEEDS

- Save time and money
- Find everything that you need in our comprehensive range of quality products from JIS and ISO ranges

IMPROVE YOUR REACTIVITY THANKS TO SHORT LEAD TIMES

- Control emergency situations
- A high level of product availability in our European Distribution Centre allows you to manage all situations

OPTIMISE THE OUTPUT OF YOUR MACHINES WITH OUR COMPLETE PRODUCT EXPERTISE

- Define the best suitable bearing unit combinations
- Benefit from the advice of our highly skilled engineering team for your specific applications

For more technical data, flash the QR CODES



DIMENSIONS AND
TECHNICAL SPECIFICATIONS



3D CAD
MODELS



ONLINE
DOCUMENTS





ANSWER EACH OF YOUR APPLICATION NEEDS

Offering exceptional value for money, the SNR bearing unit range provides solutions for a wide field of applications such as: farming machinery, food-processing, material handling, packaging machines, wood industry and many others.

NTN-SNR provides you all the products needed for each step of your production.

The majority of our products are available from stock.



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CAST IRON BEARING UNITS FOR VARIOUS INDUSTRIES

BENEFITS

QUALITY, VALUE AND PERFORMANCE

- Optimized design
- Cost efficiency orientation

FULL RANGE OF OPTIONS TO SATISFY YOUR NEEDS

- The width of the range with its multiple possibilities will make you find the most appropriate solution for your needs

QUICK DELIVERY TO FIT YOUR REQUIREMENTS

- Popular range available from our European stock

TECHNICAL CHARACTERISTICS

- Housings made of quality cast iron
- Multiple housing shapes: Pillow blocks, flanged units, tensioner, hanger and cartridge units
- Available from shaft diameter 12 – 140 mm / ½ - 3 15/16 inch
- Equipped with universal inserts (G2 system design - see page 4)
- JIS & ISO ranges available
- Relubrication facilities on all housings as standard
- Painted housings with excellent anti-corrosion properties

SPECIFIC FEATURES

- Rigid protective covers from stainless steel available for many bearing units (bore code 201-213)
- Adapter sleeve included for tapered bore bearing units with insert series UK2..G2H, UK3..G2H and LK2..G2H
- Heavy duty series 300 available from stock

DESIGNATIONS

CAST IRON SERIES

EX FL 213 CCE

BEARING INSERT

UC..G2: Chrome steel bearing insert with shaft fastening with socket set screws, wide design

US..G2: Chrome steel bearing insert with shaft fastening with socket set screws, narrow design

EX..G2: Chrome steel bearing insert with shaft fastening with eccentric locking collar, wide design

ES..G2: Chrome steel bearing insert with shaft fastening with eccentric locking collar, narrow design

UK..G2H: Chrome steel bearing insert with shaft fastening with adapter sleeve, wide design

LK..G2H: Chrome steel bearing insert with shaft fastening with adapter sleeve, narrow design

CS: Chrome steel bearing insert with shaft fastening with interference fit

For customised solutions combine the cast housings with suitable bearing inserts series:

T20, T04, L3, L4, AGR

For further information, see chapter "BALL BEARING INSERTS" starting page 16.

HOUSING

- PE** } Pillow block regular design
- PLE** }
- P** }
- PH:** Pillow block high design
- PAE** }
- PG** } Tap base pillow block
- PA** }
- FE** } Four-bolt flange, square design
- F** }
- FCE** }
- FC** } Four-bolt flange with centering rim, round design
- FEE** }
- FTE:** Three-bolt flange, triangular design
- FLE** }
- FL** } Two-bolt Flange, oval design
- FLZ:** Two-bolt flange with centering rim, oval design
- FD:** Two-bolt flange, oval narrow design
- FAE** }
- FA** } Two-bolt flange with long hole for shaft adjustment, oval design
- FS:** Four-bolt flange with centering rim, square design
- T:** Take-up unit
- T+WB:** Take-up unit with frame
- SP:** Tensioner unit
- C:** Cartridge unit
- EHE:** Hanger unit

BORE CODE

- Series 200**
201 to 218
(bore- Ø 12 – 90 mm)
- Series 300**
305 to 328
(bore- Ø 20 – 140 mm)

PROTECTIVE COVER

- For use with UC, US, UK, LK, CS**
- SCO:** open cover
- SCC:** closed cover
- For use with EX, ES**
- SCOE:** open cover
- SCCE:** closed cover
- Housing prepared for cover installation: **N**

 The **protective covers** are fixed in housing grooves. For units that are to be fitted with protective covers, housings with suffix N must be ordered. Units already ordered with cover(s) are automatically delivered with grooved housings.



USAGE EXAMPLES

CONVEYOR SYSTEMS

BEARING UNIT CHARACTERISTICS:

- Installation-friendly design
- Low maintenance requirements
- Ideally suited in conveyor systems for rollers, idler and pulleys
- Work imperceptibly and trouble-free to guarantee the operational function in every facility and all environments

To move objects from one location to another, conveyor systems work in many industrial applications.



TYPICAL SPECIFICATIONS TO BEARING UNITS IN CONVEYOR SYSTEMS:

- **Fast tensoning and release system for rollers**
Tensioner units with welded frame T200 + WB, SP + SPR, FA200 and FAE200 with slotted hole
- **Injury prevention against turning shaft ends**
Installation of protective cap PCC (closed) or PCO (open)
- **Small installation space**
FD series with narrow set screw bearing insert US..G2 or eccentric locking collar type ES..G2
- **Designed for higher loads**
Series 300 available as pillow block, flange or tensioner unit
- **Protection against impacts, dust and humidity**
Bearing units with protective covers SCC (closed) or SCO (open), Bearing inserts with AGR or L4 seal system
- **Change of rotation direction or high rotation speeds**
Bearing inserts with adapter sleeve type UK..G2H or LK..G2H or bearing insert type CS with interference fit

AGRICULTURE

BEARING UNIT CHARACTERISTICS:

- User-friendly design
- Service-free operation
- Ability to compensate static shaft misalignment

The SNR range of bearing units is under continuous development. For decades, NTN-SNR is working with outstanding partners in the farming industry.



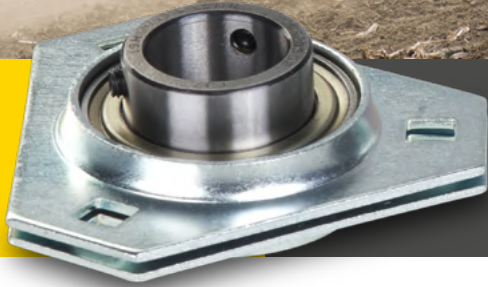
TYPICAL REFERENCES FOR FARMING MACHINERY:



References	d	L	J	Seal type	
	Dimensions (mm)				
EXFE308A05AGR	40.000	130.000	101.500	AGR	
EXPAE206L3	30.000	98.000	76.200	L3	
EXPAE208L3	40.000	116.000	88.900	L3	
UCFE308A05AGR	40.000	130.000	101.500	AGR	
UCF208AGRLP	40.000	130.000	102.000	AGR	
D-UCF210A10AGR	50.000	143.000	111.000	AGR	
D-UCF212A10AGR	60.000	175.000	143.000	AGR	
UCF212AGR	60.000	175.000	143.000	AGR	
UCFC212L3	60.000	175.000	143.000	L3	
XUCFE308A05B168	40.000	130.000	101.500	AGR	
XUCFE308B01B169	40.000	130.000	101.500	AGR + L4	



FOR IMPLEMENTS IN AGRICULTURE MACHINERY



PRESSED STEEL BEARING UNITS

BENEFITS

BEST ECONOMICAL SOLUTION FOR LIGHTWEIGHT CONSTRUCTIONS

- Particularly used in applications where weight is a major constraint

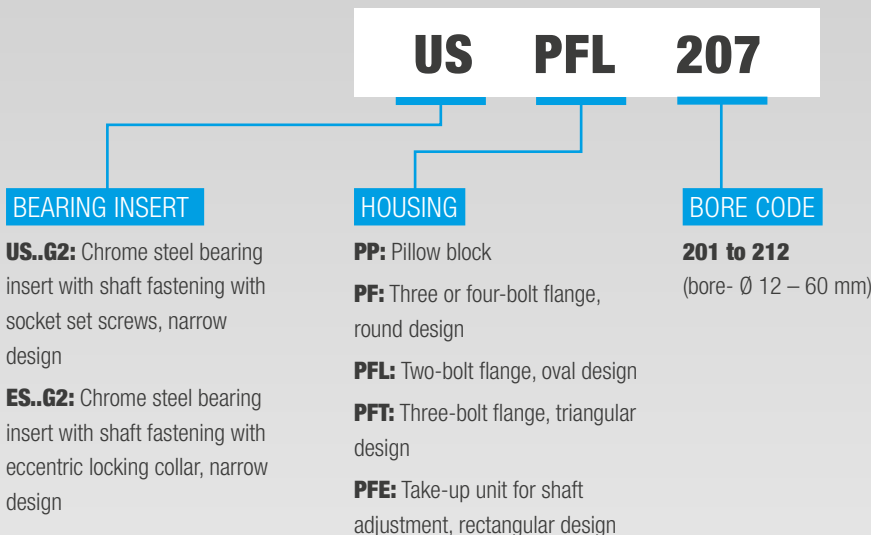
TECHNICAL CHARACTERISTICS

- Two-piece housing made from zinc coated sheet steel
- Available as pillow block, flanged or take-up unit
- Equipped with universal inserts (G2 system design - see page 4)
- Suitable for narrow ball bearing inserts set screw type US..G2, eccentric locking collar type ES..G2 and type CS with interference fit
- Made for low to moderate loads & speeds



DESIGNATIONS

PRESSED STEEL SERIES





FOR USE IN THE CHEMICAL, PHARMACEUTICAL
AND FOOD-PROCESSING INDUSTRIES



STAINLESS STEEL BEARING UNITS

BENEFITS

PREMIUM LINE

- Optimum performance with a strong focus on protection from oxidation, mould, bacteria and chemical cleaning agents
- High performance lubricant
- High-quality stainless steel
- Relubrication facility on all housings

RESILIENT

- Excellent mount stability and impact resistance
- Recess-free housing contact surface to prevent deposits of the process material
- Designed to withstand aggressive cleaning and corrosive environments
- Open or closed protective covers from stainless steel available for all housings

LESS DOWNTIME MORE PROFITABILITY

- Protective covers for units provide additional protection during high pressure washdown



TECHNICAL CHARACTERISTICS

- 100% stainless steel resistant to corrosion: will never chip and contaminate the end product
- Food-grade seal with additional slinger (SUC)
- USDA H1 grease fully compliant with FDA regulations
- Shaft fastening by set screw or eccentric locking collar
- Metal cage
- The protective covers are fixed in housing grooves



HIGH PRESSURE WASHING



CLEANING AGENTS



HUMIDITY



HYGIENE STANDARDS



SUITABLE FOR THE USE OF LUBSOLID® BEARING INSERTS

DESIGNATIONS

STAINLESS STEEL SERIES

SUC F 206 FG1 CO

BEARING INSERT

SUC: Stainless steel bearing insert with shaft fastening by socket set screw

SES: Stainless steel bearing insert with shaft fastening by eccentric locking collar

SUC..FG1: Stainless steel bearing insert with shaft fastening by socket set screw, LUBSOLID® filling

HOUSING

SP: Pillow block

SPA: Tap base pillow block

SF: Four-bolt flange

SFL: Two-bolt flange

SFB: Three-bolt flange

ST: Take-up

BORE CODE

201 to 212

(bore- Ø 12 – 60 mm)

LUBSOLID®

Only when the unit is equipped with **LUBSOLID® bearing insert**

PROTECTIVE COVER

For use with SUC

SCO: open covers

SCC: closed covers

For use with SES

SCOE: open covers

SCCE: closed covers

Housing prepared for covers installation: **N**



For units that are to be fitted with protective covers, housings with suffix N must be ordered. Units already ordered with cover(s) are automatically delivered with grooved housings.



FOR FOOD-PROCESSING AND RELATED ENVIRONMENTS

THERMOPLASTIC BEARING UNITS

BENEFITS

EASY TO CLEAN

- Resistant to numerous chlorine-containing and corrosive cleaning solutions
- Insensitive to bacteria formation
- Recess-free housing contact surface to prevent deposits of the process material
- Protective caps for units to provide additional protection against regular wash downs
- Smooth surfaces

RESILIENT

- Good friction and wear properties
- Mounting holes reinforced with metal bushings
- Equipped with bearing inserts from stainless steel



TECHNICAL CHARACTERISTICS

- 100% stainless steel bearing inserts resistant to corrosion: will never chip and contaminate the end product
- All metallic components made of high-quality stainless steel
- Food-grade seal with additional slinger
- High performance lubricant according to NSF H1
- Metal cage

SPECIFIC FEATURES

- Relubrication facility on all housings
- Additional protection through open or closed end covers (tool-free installation)
- Can optionally be combined with food-grade solid grease bearing insert



HIGH PRESSURE WASHING



CLEANING AGENTS



HUMIDITY



HYGIENE STANDARDS



SUITABLE FOR THE USE OF LUBSOLID® BEARING INSERTS

DESIGNATIONS

THERMOPLASTIC SERIES

MUC PPL 206

BEARING INSERT

MUC..FD: Stainless steel bearing insert with shaft fastening by socket set screw

SUC..FG1: Stainless steel bearing insert with shaft fastening by socket set screw, LUBSOLID® filling

HOUSING

PPL: Pillow block
TBL: Tap base pillow block
FPL: Four-bolt flange
NFL: Two-bolt flange
FBL: Three-bolt flange

BORE CODE

204 to 208
 (bore- Ø 20 – 40 mm)

PROTECTIVE CAP

All housings are equipped with appropriate grooves where caps can snap into place

CV: open cap
CF: closed cap



Protective caps must be ordered separately.

BALL BEARING INSERTS



SHAFT FASTENING WITH SET SCREWS

Available for metric and imperial shafts

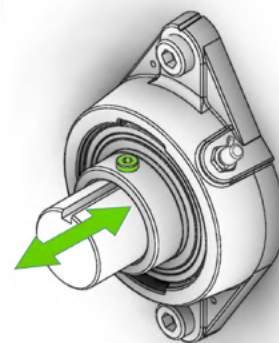
SPHERICAL OUTER RING



UC / SUC / MUC / ZUC
with wide inner ring design



US
with narrow inner ring design



By replacing the set screws, bearing inserts type UC and US can easily be converted into a floating bearing arrangement.

CYLINDRICAL OUTER RING



CUC
with wide inner ring design



CUS
with narrow inner ring design

TECHNICAL CHARACTERISTICS

- Easy and quick to install on the shaft
- Suitable for applications with alternating directions of shaft rotation
- Equipped with two self-locking cup point set screws for a safe and secure fastening of the bearing to the shaft
- No special mounting tools required
- For floating bearing arrangements by using optional floating screw SH (available for all bearing units series UC2 and UC3)

SET SCREW TYPES

Bearing insert	Shaft-Ø [mm]	Bearing material	Inner ring design	Seal (on both sides)	Specific characteristics / possible use
UC2..G2 / UC3..G2	12-140	Steel	Wide	1-lip seal and slinger	Basic version.
UC2..G2L3	12-90			Triple lip seal	For applications in heavily dirt contaminated environments.
UC2..G2L4	12-50			Multiple seal system	Zinc-coating, reduced internal clearance, for heavily dirt contaminated environments, moderate torque, corrosion protected.
UC2..AGR*	30-60			AGR seal system	Zinc-coating, 90% grease filling, maintenance-free, powerful seal with massive steel protector for heavily polluted applications.
UC2..G2T04 / UC3..G2T04	12-140			1-lip seal and slinger	Operating temperature down to -40°C.
UC2..G2T20	12-90			Labyrinth seal	Black-oxide-coated, increased internal clearance, for permanent operating temperature up to +200°C.
US2..G2	12-60		Narrow	1-lip seal	Basic version.
US2..G1N**	25-40				For use with protective caps PCC and PCO.
US2..G2T04	12-60				Operating temperature down to -40°C.
US2..G2T20	12-60				Black-oxide-coated, increased internal clearance, for permanent operating temperature up to +200°C.
SUC2	12-60	Stainless steel	Wide	1-lip seal and slinger	Food-grade grease filling, outer ring with anti-rotation pin, approved for the direct contact with foodstuffs.
SUC2..FG1	20-60				LUBSOLID® food-grade grease filling, outer ring with anti-rotation pin, maintenance-free, anti-contamination effect, for the most stringent food safety requirements.
MUC2..FD	20-40				Food-grade grease filling, outer ring with anti-rotation pin, reduced internal clearance, approved for the direct contact with foodstuffs.
ZUC2..FG	20-40	Steel	Wide	1-lip seal and slinger	Zinc-coating, food-grade grease filling, cost-effective alternative for food applications without direct contact to foodstuffs.
CUC2	20-50				Cylindrical outer ring with snap ring groove for axial fixation, lubrication hole, not for use in standard housings with spherically shaped bearing seat.
CUS2	20-50				Narrow

* not for use in all standard housings

** suitable for the installation in ISO flanged-housings

SHAFT FASTENING WITH ECCENTRIC LOCKING COLLAR

Available for metric and imperial shafts

SPHERICAL OUTER RING



EX

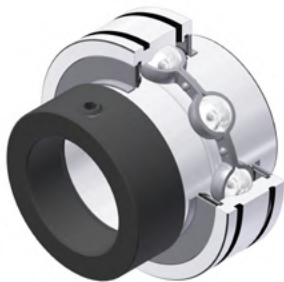
with wide inner ring design



ES / SES

with narrow inner ring design

CYLINDRICAL OUTER RING



CEX

with wide inner ring design



CES

with narrow inner ring design

TECHNICAL CHARACTERISTICS

- For higher loads in axial direction compared to set screw types
- Particularly easy to fit
- Decreased damage of shaft surface
- Easier to disassemble
- Only suitable for one direction of rotation

ECCENTRIC LOCKING COLLAR TYPES

Bearing insert	Shaft-Ø [mm]	Bearing material	Inner ring design	Seal (on both sides)	Specific characteristics / possible use
EX2..G2 / EX3..G2	12-140	Steel	Wide	1-lip seal and slinger	Basic version.
EX2..G2L3	12-90			Triple lip seal	For applications in heavily dirt contaminated environments.
EX2..G2L4	12-55			Multiple seal system	Zinc-coating, reduced internal clearance, for heavily dirt contaminated environments, moderate torque, corrosion protected.
EX2..AGR*	35-60			AGR seal system	Zinc-coating, 90% grease filling, maintenance-free, powerful seal with massive steel protector for heavily polluted applications.
EX2..G2T04 / EX3..G2T04	12-90			1-lip seal and slinger	Operating temperature down to -40°C.
EX2..G2T20	12-90			Labyrinth seal	Black-oxide-coated, increased internal clearance, for permanent operating temperature up to +200°C.
ES2..G2	12-60	Stainless steel	Narrow	1-lip seal	Basic version.
ES2..G2T04	12-60				Operating temperature down to -40°C.
ES2..G2T20	12-60				Black-oxide-coated, increased internal clearance, for permanent operating temperature up to +200°C.
ES2..G1N**	15-45				For use with protective caps PCC and PCO.
SES2	12-60				Food-grade grease filling, approved for the direct contact with foodstuffs.
CEX2	20-50	Steel	Wide	1-lip seal and slinger	Cylindrical outer ring with snap ring groove for axial fixation, lubrication hole, not for use in standard housings with spherically shaped bearing seat.
CES2	20-50		Narrow	1-lip seal	Cylindrical outer ring with snap ring groove for axial fixation, without relubrication facility, not for use in standard housings with spherically shaped bearing seat.

* not for use in all standard housings

** suitable for the installation in ISO flanged-housings

SHAFT FASTENING WITH ADAPTER SLEEVE

UK..H available for metric and imperial shafts

LK..H available for metric shafts



UK..H
with wide inner ring design



LK..H
with narrow inner ring design

To increase the rotational speed or the running smoothness of a machine, use LK..H. It simply replaces bearing inserts with set screws or eccentric locking collars. Despite using the adapter sleeve, the shaft diameter will not be modified and neither the adjacent construction (shaft and housing).

TECHNICAL CHARACTERISTICS

- Highly suitable for shafts with frequent rotation reversals
- For higher speeds
- No damage of the shaft surface
- Are connected to the shaft concentrically by a force locking connection (particularly quiet in operation)
- Special tool required for correct mounting
- Shaft diameter reduction (only UK..H)

Bearing insert	Bearing material	Inner ring design	Seal (on both sides)	Shaft-Ø [mm]	Specific characteristics / possible use
UK2..G2H / UK3..G2H	Steel	Wide	1-lip seal and slinger	20-125	Adapter sleeve type H23 included, increased internal clearance, enable a concentric and force-fit connection of the bearing on the shaft, suited for frequent change of rotation direction and high rotation speeds, smooth running.
LK2..G2H		Narrow	1-lip seal	20-50	Adapter sleeve included, increased internal clearance, enable a concentric and force-fit connection of the bearing on the shaft, no shaft diameter reduction, suited for frequent change of rotation direction and high rotation speeds, smooth running.

SHAFT FASTENING WITH INTERFERENCE FIT

CS available for metric shafts

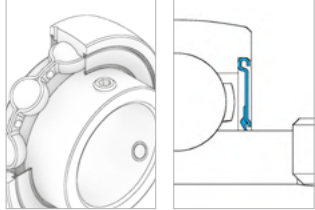
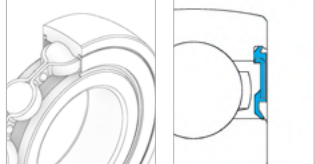
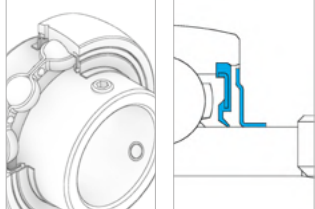
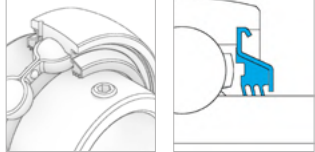
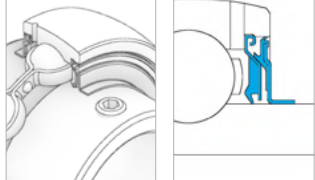
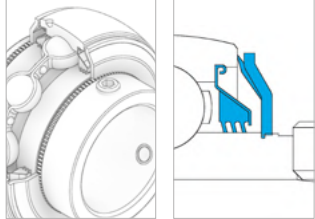
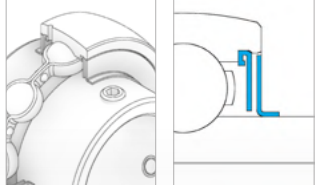


CS
without inner ring extension

Bearing insert	Bearing material	Inner ring design	Seal (on both sides)	Shaft-Ø [mm]	Specific characteristics / possible use
CS2	Steel	Narrow	1-lip seal	12-50	Interference fit, without relubrication facility, suited for high rotational shaft speeds, smooth running.

SEALING SOLUTIONS



Seals for insert bearings	References	Technical characteristics	Benefits
	<p>One-lip seal with protective edge</p> <p>US..G2, US..G1N, US..G2T04, US..G2T20, CUS, ES..G2, ES..G1N, ES..G2T04, ES..G2T20, SES, CES, LK..G2H</p>	<p>Zinc-coated sheet steel retainer* with vulcanised seal. The axially preloaded seal lip from NBR** is located behind a protective edge.</p> <p>* Stainless steel for SES Black-oxide-coated for T20</p> <p>** Silicon for SES and design T20</p>	<ul style="list-style-type: none"> • Normal environmental conditions • Medium to high rotation speeds
	<p>One-lip seal</p> <p>CS</p>	<p>Sheet steel retainer over-moulded with NBR material. Axially preloaded seal lip.</p>	<ul style="list-style-type: none"> • Normal environmental conditions • Medium to high rotation speeds
	<p>One-lip seal with slinger</p> <p>UC..G2, UC..G2T04, SUC, MUC..FD, EX..G2, EX..G2T04, CEX, UK..G2H</p>	<p>Zinc-coated sheet steel retainer* over-moulded with NBR and axially preloaded seal lip** + preconnected, zinc-coated sheet steel slinger* for improved protection against mechanical impacts.</p> <p>* Stainless steel for SUC ** Silicon for SUC / Food grade NBR for MUC..FD</p>	<ul style="list-style-type: none"> • Additional protection against particles • Medium to high rotation speeds
	<p>Triple lip seal</p> <p>UC..G2L3, EX..G2L3</p>	<p>Zinc-coated sheet steel retainer with vulcanised triple lip seal. The lips from NBR are axially preloaded and angled outwards. The protective edge of the retainer serves as a safeguard against mechanical impacts.</p>	<ul style="list-style-type: none"> • For medium to heavily polluted environments • Lower rotation speed • Higher friction
	<p>Multiple seal system</p> <p>UC..G2L4, EX..G2L4</p>	<p>Two zinc-coated steel sheet elements with vulcanised seal lips from NBR. The internal retainer is equipped with a radial seal to the inner ring, while the external slinger has a radial seal to the outer ring. A third seal lip is intermediate and act axially.</p>	<ul style="list-style-type: none"> • For medium to heavily polluted environments • Medium rotation speeds • Lower friction • Suitable for pressure washing
	<p>High-performance seal system</p> <p>UC..AGR, EX..AGR</p>	<p>Zinc-coated steel sheet retainer with vulcanised triple lip seal. The lips from NBR are axially preloaded and angled outwards. The triple lip seal is completely covered by a massive steel protector. The zinc-coated impact shield is additionally equipped with a lip seal and strongly secured on a knurled seat.</p>	<ul style="list-style-type: none"> • For extremely polluted environments • Shock resistant • Low rotation speeds • Suitable for high-pressure washing • Higher friction
	<p>High temperature non-contact seal</p> <p>UC..T20, EX..T20</p>	<p>Labyrinth seal from two black-oxide-coated steel sheet slinger in parallel arrangement.</p>	<ul style="list-style-type: none"> • For high temperature use • Very low friction



FOR FOOD-PROCESSING INDUSTRY



BEARING INSERT SERIES
SUC..FG1
LUBSOLID®

BENEFITS

INCREASE THE PROFITABILITY AND EFFICIENCY OF YOUR MACHINES

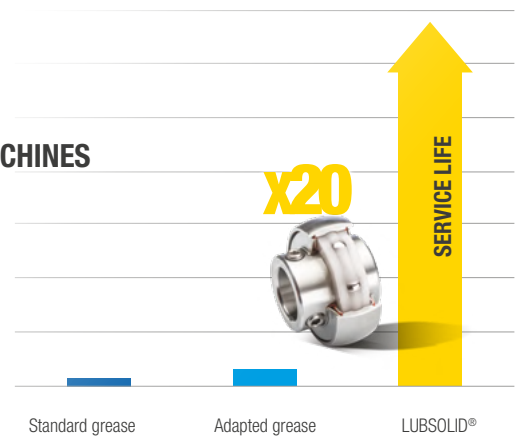
- Up to 20 times longer bearing lifetime
- Higher reliability and maintenance-free operation
- Longer machine operating times: cost savings and productivity gains
- Lower maintenance and material costs

IMPROVE HYGIENE AND SAFETY CONDITIONS

- Anti-contamination effect: no lubricant leakage possible
- Food grade lubricant with NSF certificate
- All metallic components made of high-quality stainless steel
- Insensitive to contamination
- Resistant to cleaning agents

INSTALL AND FORGET

- No need for regular monitoring or service: suited for locations with difficult access
- Ideal match with both bearing unit ranges - thermoplastic and stainless steel



GREASED FOR LIFE



HYGIENE STANDARDS



FOR HARSH ENVIRONMENTS



BEARING INSERT SERIES*
UC..AGR / EX..AGR
AGR

BENEFITS

ROBUST AND RELIABLE

- High durability and resistant to strong mechanical impacts
- Maintenance-free: bearing lubricated for life
- Resistant to high pressure washing
- No risk of deficient lubrication
- No environmental contamination due to leaking lubricants

LESS MACHINE DOWNTIMES, MORE PROFITABILITY

- Better operating performance
- Longer machine operating times: cost saving and productivity gains
- Lower maintenance and material costs

PROFIT FROM THE VARIETY IN USE

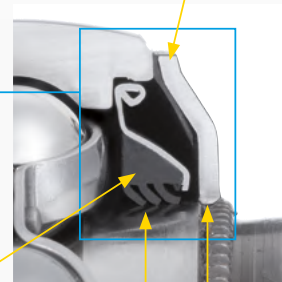
Combine AGR bearing inserts with many SNR housings and create the bearing unit that best suits your application, such as: power and disc harrows, shredders / chippers, conveyor systems, crushers, mills...

*Available as bearing insert with set screws UC..AGR and eccentric locking collar EX..AGR

Zinc-plated shield equipped with a single lip seal to seal the contact with the outer ring (zinc-plated)

AGR sealing system

Triple lip L3
Excellent protection against pollution



For lifelong lubrication, high-performance grease with fill factor of 90%:

- Good protection against wear
- Suitable for heavy loads

Crimped shield on inner ring (zinc-plated)



GREASED FOR LIFE

PROTECTIVE COVERS

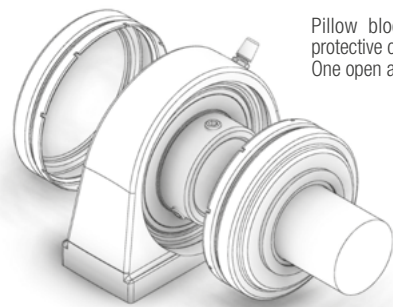


FOR BEARING UNITS FROM CAST IRON AND STAINLESS STEEL



Most of the bearing units made of cast iron or stainless steel can be equipped with additional protective covers. The covers are generally made from stainless steel. They are available as closed or open version with double lip seal for bore code 201 to 213 (shaft- Ø 12 – 65 mm).

BENEFITS


- Improve safety requirements
- Protect the bearing against external influences
- Prevent the discharge of lubricants into sensitive environments
- For shafts ends and through shafts



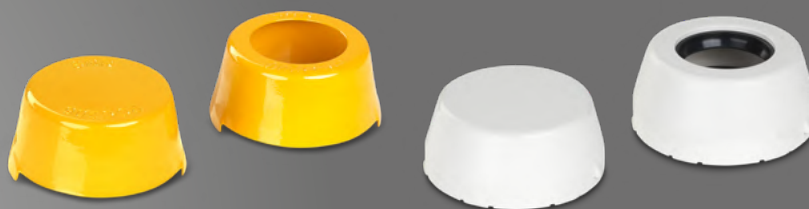
Pillow block unit with two protective covers. One open and one closed.

Suffix	Description	Cover type	Suitable in combination with bearing insert type:	Design
CC	Bearing unit with narrow cover (closed version)	SCC	Set screw, Adapter sleeve, Fit	Open version  Closed version 
CO	Bearing unit with narrow cover for metric shaft (open version)	SCO		
COU	Bearing unit with narrow cover for imperial shaft (open version)	SCOU		
CCE	Bearing unit with wide cover (closed version)	SCCE	Eccentric locking collar	
COE	Bearing unit with wide cover for metric shaft (open version)	SCOE		
COEU	Bearing unit with wide cover for imperial shaft (open version)	SCOEU		
N	Unit / Housing prepared for cover(s) installation	-	/	

- For a very strong fit and an outstanding sealing effect, the protective covers are fixed in housing grooves
- For the installation of protective covers, flanged housings are equipped with one groove on the front side
- All other housings have two machined grooves

 Bearing units that are ordered with cover(s) include the housings with grooves. If you want to install the protective covers later, housings with suffix N must be ordered (for example: P210N).

PROTECTIVE CAPS

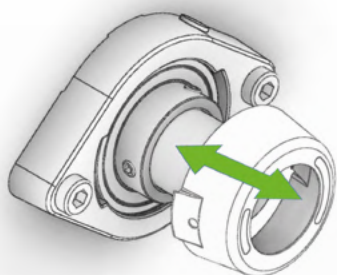


FOR EUROPEAN SERIES BEARING UNITS FROM CAST IRON

Available for shaft ends and through going shafts

BENEFITS

- Reduce the risk of injury from rotating shaft ends
- Protect the bearing to increase its performance in service
- Permit larger deviations in shaft misalignment
- Tool-free installation



Tool-free installation – latch the protective cap simply to the unit

Cap type / Suffix	Description	
PCO	Protective cap (open version)	
PCC	Protective cap (closed version)	
G1N	Bearing insert with groove in the outer ring	

Protective caps have to be ordered separately from the bearing units. Due to the special design of the housings, these protective caps can only be fitted on one side.

To install the cap "tool free", bearing insert series G1N must be installed to the bearing unit. These bearings have a special groove machined in their outer rings in which the protector can snap into place (for example: US206G1N).

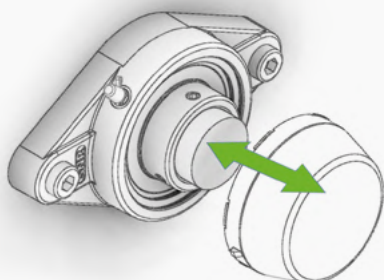
FOR BEARING UNITS FROM THERMOPLASTIC

Available for shaft ends and through going shafts

All housings of this range are already equipped with appropriate grooves where protective caps can snap into place. Both the closed and the open version with shaft seal are available from bore code 204 to 208 (shaft- Ø 20 – 40 mm).

BENEFITS

- Reduce the risk of injury from rotating shaft ends
- Good sealing effect due to radial shaft seal (CV)
- Prevent the discharge of lubricants into sensitive environments
- Tool-free installation



Tool-free installation in existing housing grooves

Cap type	Description	
CV	Protective cap (open version)	
CF	Protective cap (closed version)	

SUFFIX & PREFIX

Suffix	
AGR	Service-free bearing insert with high performance seal
CA	Bearing unit ready to be equipped with protector PCC / PCC
CC	Bearing unit with narrow protective cover(s) - closed version
CCE	Bearing unit with wide protective cover(s) - closed version
CO	Bearing unit with narrow protective cover(s) - open version for metric shafts
COE	Bearing unit with wide protective cover(s) - open version for metric shafts
COEU	Bearing unit with wide protective cover(s) - open version for imperial shafts
COU	Bearing unit with narrow protective cover(s) - open version for imperial shafts
FG1	Stainless steel bearing insert with LUBSOLID® food-grade grease filling
FG	Bearing insert with zinc-coating and food-grade grease filling
G1N	Bearing insert with outer ring groove for tool-free protective cap installation
G2	SNR 2-planes re-greasing system with 4 grease bores in the outer ring
H	UK bearing insert equipped with adapter sleeve
L3	Bearing insert with triple lip seal
L4	Bearing insert with multiple seal and reduced rotation torque
N	Housing designed for protective cover(s) installation (machined grooves)
T04	Bearing insert for cold environments (down to - 40°C)
T20	Bearing insert for hot environments (up to + 200°C)

Prefix	
S	Stainless steel type
C	Bearing insert with cylindrical outer ring matching JIS norm
Z	Bearing insert for food-processing industry

OTHER MOUNTED UNITS

BEARING HOUSINGS WITH GREASE LUBRICATION



SPLIT PLUMMER BLOCK HOUSING SNC / SNCD500

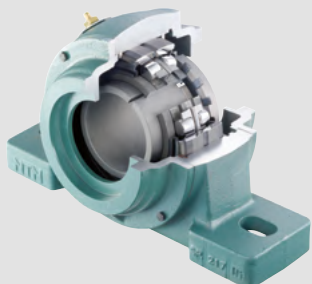
- SN housing according to ISO113-2010 to house bearings with a cylindrical or tapered bore
- High stiffness and stability under all load conditions
- Optimised heat dissipation
- Reduced stresses in the bearing
- Extended service life and prolonged service intervals
- For shaft diameters from 20 mm to 140 mm
- Housing material: Cast iron with flake graphite and/or spheroidal graphite (SNCD)
- 5 different seal arrangements for a wide range of applications
- User-friendly design features for ease of service and rapid installation



LARGE PLUMMER BLOCK HOUSING SNCD

Split housing according to ISO113-2010 for spherical roller bearings with cylindrical or tapered bore

- Housing material: Spheroidal graphite iron
- Operation temperature down to -40°C
- Optimised heat dissipation
- Wide reinforcing belt and support arch construction for increased dimensional stability
- Extended bearing service life and prolonged service intervals
- Labyrinth and Taconite seal
- Various connections for lubricant supply and condition monitoring sensors
- Shaft diameter 115 to 500 mm



SPW/SFCW – BEARING HOUSINGS FOR HEAVY LOADS

- Suitable for very harsh environments in the timber industry and heavy industry
- Bearing and housing protected against corrosion
- Rapid replacement of the patented bearing unit
- Sealed spherical roller bearing
- Rapid commissioning, increased productivity
- Series SPW interchangeable with SN series bearing housings
- Shaft diameter: 50 to 140 mm



ONE-PIECE BEARING HOUSING ZLG / DLG

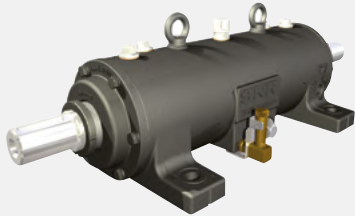
- For the installation of two or three rolling bearings
- Grease lubrication
- Suitable for high operating speeds (industrial fans)
- Extremely smooth operation due to precise alignment of the bearings in the housing
- Felt seal with additional V-ring seal
- Easy installation on the clamping area
- Shaft diameter, ZLG: 30 to 120 mm / DLG: 70 to 120 mm



BEARING HOUSINGS FOR SPECIAL APPLICATIONS 722500, F11200, TVN, TN

- Compact sealed housings in grey cast iron
- TVN: suitable for operating temperatures up to +350°C
- Suitable for critical environments: Hot and humid / hot and dry
- Possible applications in constructions of the sand-lime brick or clinker industry
- TVN/TN: can be installed in any position
- Shaft diameter, TVN: 20 to 75 mm / TN: 20 to 60 mm
- F11200 / 722500: flanged housing unit
- Shaft diameter, F11200: 20 to 50 mm / 722500: 20 to 100 mm

BEARING HOUSINGS WITH OIL LUBRICATION



ONE-PIECE BEARING HOUSING ZLOE

- Equipped with two radial contact ball bearings or a combination of a radial contact ball bearing with a cylindrical roller bearing
- Suitable for applications with high load capacities combined with high operating temperatures
- Particularly well-suited for high speed applications, e.g. industrial fans
- Extremely smooth operation due to precise alignment of the bearings in the housing
- Easy installation of the bearing unit on the clamping area
- Labyrinth system provides efficient, low-friction seal
- Can be used with oil circulation or oil injection lubrication
- Shaft diameter: 75 to 120 mm



SPLIT BEARING HOUSING SNOE

- Suitable for spherical roller bearings
- For applications with high operating speeds and heavy loads
- Housing material: EN-GJS for especially high strength and torsional rigidity
- Internal oil distribution via an oil pick-up ring
- Labyrinth sealing system
- Equipped with an oil-level indicator
- Can be used with optional oil circulation, oil cooling or oil pre-heating system
- Excellent heat dissipation
- Application areas: Industrial fans, hammer mills, stone crushers
- Shaft diameter: 70 to 260 mm (the largest standard oil-lubricated bearing housing on the market)



SPLIT BEARING HOUSING SNOL (COMPACT VERSION)

- Suitable for spherical roller bearings
- Low-friction labyrinth seal system
- SNOL bearing housings can replace grease-lubricated units from the SN series. This may be necessary in case of: - Increased operating speeds - Higher operating temperatures - Extended service life - Prolonged maintenance intervals
- Equipped with an oil-level indicator
- Shaft diameter: 60 to 140 mm





BEARING UNITS

Accessible quality

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