



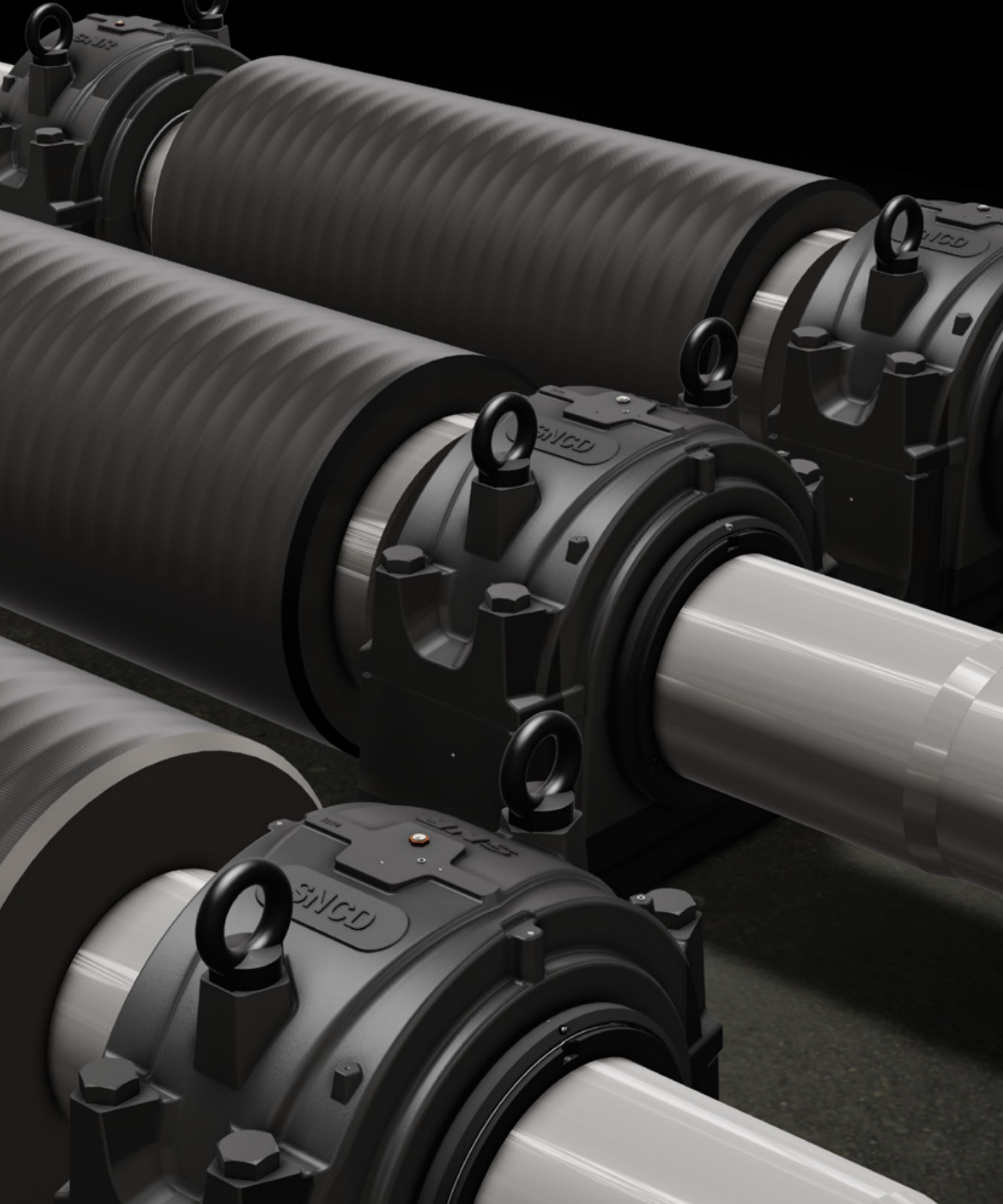
LARGE PLUMMER BLOCK HOUSINGS **SNCD**

NTN 

www.ntn-snr.com



With You



SNCD large plummer block housings

The heavy-duty range

CONTENTS

1. SNCD large plummer block housings	4
2. Product description	5
Bearing arrangement	5
Fixed and floating bearings	5
Long service life and high operational reliability	6
Design details	7
Configuration of bearing housings	10
3. Seal systems	11
Labyrinth seal TS	11
Taconite seal TA	12
TE cover	13
Special seals	14
Seal selection	15
4. Lubrication	16
Grease	16
Quantities of grease for initial filling	16
Re-lubrication	16
Lubricant replacement	16
Grease quantity table	17
Grease nipples and threaded plugs	18
5. Installation	20
Installation preparations and safety instructions	20
Installation instructions for SNCD plummer block housings	20
Bearing installation	20
Installation of bearings with a cylindrical bore / installation on stepped shaft	21
Installation of bearings with a tapered bore / installation on smooth shaft	21
Oil injection method	21
Hydraulic nuts (HMV...EBF)	21
Reduction of radial bearing clearance	22
Housing breaking loads and load capacity of connecting bolts	23
Housing mounting	24
Mounting holes	24
Tightening torques for connecting and foot bolts	25
6. Installation of labyrinth seal TS	26
7. Installation of Taconite seal TA	29
8. Designation system	32
9. Explanations - Order example	33
Scope of delivery SNCD plummer block housings	33
Material / Paint / Corrosion protection	33
SNCD large plummer block housing order examples	33
10. Other model series	34
11. Dimension tables	36

1. SNCD LARGE PLUMMER BLOCK HOUSINGS

The heavy-duty range

The plummer block housings of the SNCD series developed by NTN-SNR are designed for highly demanding, continuous use in mining, conveying, materials and steel industry applications as well as in other heavy industries. Equipped with spherical roller bearings, during operation these bearing units can bear massive loads. SNCD housings are available for bearings with a shaft diameter ranging from 115 mm to 500 mm and from 5 13/16 inches to 18 1/2 inches.



2. PRODUCT DESCRIPTION

The SNCD split plummer block housings are similar in design to the housings of the SNC series. The housing's ductile EN-GJS cast iron body comprises an upper and a lower section.

The two halves are joined by four connecting bolts. To protect the bearing, seals are used in the shaft outlet holes. The standard accessories that NTN-SNR offers for these housings include labyrinth seals and high-performance multiple seals (Taconite). Labyrinth seals are well-suited for ambient conditions with normal contamination. Taconite seals, on the other hand, with their extraordinarily robust design and highly effective sealing, are more often used in harsh environments with high contamination levels. Housings closed on one side are sealed with an end cap. Grease

can be supplied to the bearing from outside through various lubrication connections in the housing.

The split design of the housing facilitates installation and maintenance. Shafts with pre-mounted bearings, seal elements and other mechanical components can be installed from above in the lower section of the housing after it has already been aligned and bolted to the mounting surface.

Bearing arrangement

As standard, SNCD housings are compatible with ISO standard 30 and 31 sized spherical roller bearings, but they can also be fitted with other ISO standard sized bearings. Bearings with a cylindrical bore are mounted on stepped shafts against a shaft shoulder, whilst bearings with a tapered bore are secured by means of an adapter sleeve on smooth shafts.



We recommend the use of our ULTAGE spherical roller bearings with elevated load ratings and extended service life. The full performance potential of ULTAGE bearings can be efficiently exploited when used in combination with the large plummer block housings of the SNCD series.

Fixed and floating bearings

All SNCD plummer block housings can be used with both fixed and floating bearing configurations. Housings in which the bearing must be secured against axial displacement are equipped with the appropriate locating rings.

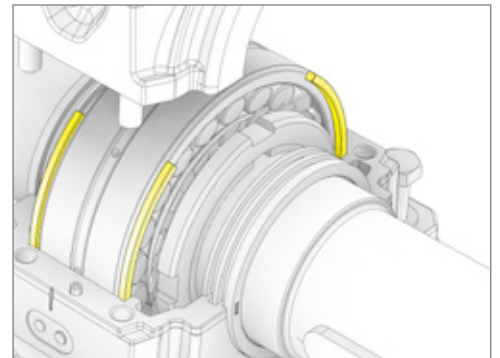
The open locating rings are inserted into the housing on both sides of the bearing in the same quantity.

The size and quantity of required locating rings are listed in the dimension tables (see from page 36).

Locating ring designation system:

FR360x12x10

1. Outer diameter of the ring
2. Ring width
3. Ring thickness



With the large plummer block housings of the SNCD series, you increase the quality and service life of your machinery and equipment and set new standards for efficiency and economy.

Long service life and high operational reliability

In order to optimise the support and guidance of the bearing, our engineers have concentrated on the design of the bearing seat. The highly precise geometry of the bearing seat during operation is the key to high operational reliability and perfect function of the rolling bearing.

The housings of the SNCD series have newly developed design elements, such as the wide reinforcement rib on the upper section and the arch-shaped support structures in the lower section. These structural design elements enable the SNCD housings to achieve high stiffness, provide for improved load distribution, and offer excellent dimensional stability.

The X-shaped rib pattern underneath the bearing seat and the two lateral cross-braces are additional elements, which reinforce the structure

at decisive points and favour uniform load distribution. Moreover, the large contact surface effectively dissipates the operating heat into the mounting surface.

Due to this especially robust structural design, the bearing is subjected to lower stress when used in an SNCD housing, because load spikes and operating temperatures are reduced. This extends the service life of the bearing and prolongs its lubricant replacement intervals, thereby lowering operating costs.



High stiffness:

Wide reinforcement rib on the upper section.

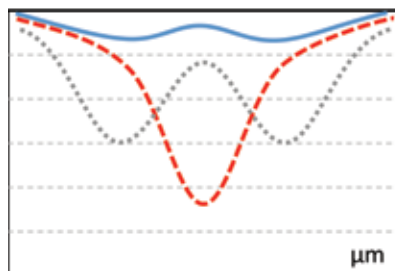
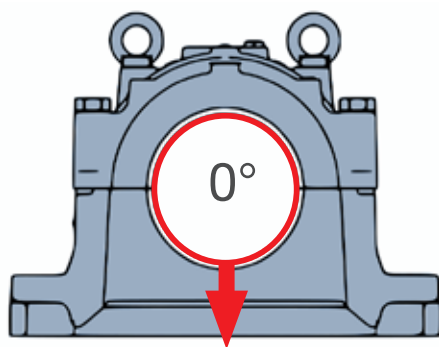
Optimal load distribution:

Patented support arch design in the lower section.

Bearing seat X-shaped central support:

Cross-braces for the distribution of clamping forces (foot bolts). Large seat contact surface for effective heat dissipation.

Deformation behaviour of the bearing seat



Load direction vertical to the assembly surface

— SNCD large plummer block housings with X-shaped central support

Efficient, symmetric load distribution via lateral and central support elements

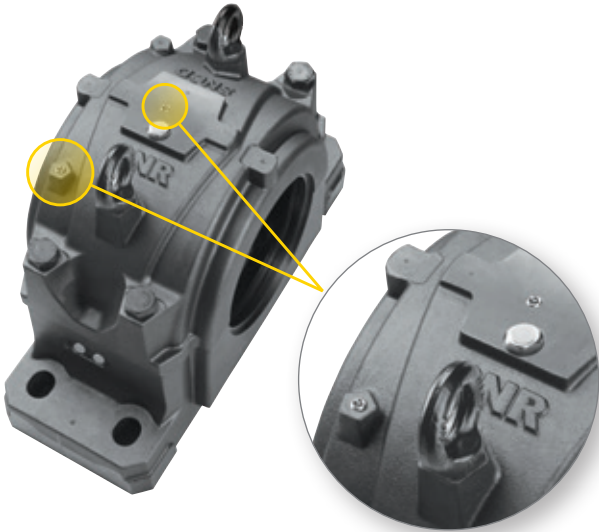
- - - Plummer block housings without central support

Maximum load of the lowest rolling elements in main load zone

..... Plummer block housings with central support only

Undesirable deformation due to lack of lateral support points

Design details



Lubricant supply

All housings are equipped as standard with three lubrication holes. There are two holes in the upper section and a third is located on the side of the housing.

Markings on the casting surface indicate additional options for the placement of grease nipples.

One flat and one conical grease nipple (M10x1 each) as well as one adapter (M10x1 to G1/4) are included inside the housing.

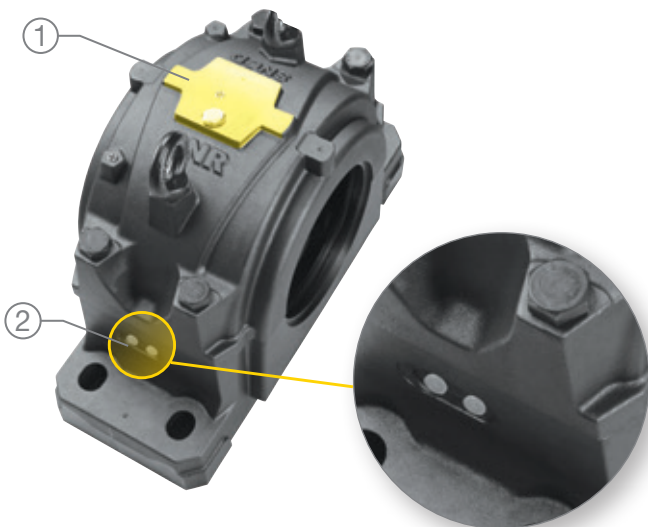
Chapter "Lubrication" p.16



Grease escape bore

SNCD housings are already equipped with two grease escape bores at the factory. They are fitted with threaded plugs. To discharge used, excess grease, these holes must be opened when re-lubricating the bearing.

Chapter "Lubrication" p.16



Connection options

If necessary, SNCD housings can be fitted with measurement sensors, such as vibration pick-ups or temperature sensors.

① On the upper section of the housing:

1x threaded hole for mounting temperature sensors

G1/2 with reducing adapter to G1/4

For individual connection options

The machined surface on the upper section of the housing can be used to install additional sensors or systems for monitoring the bearing.

② On the side of the housing:

2x threaded holes for mounting vibration sensors

M8 and M10

(holes are fitted with plastic plugs)



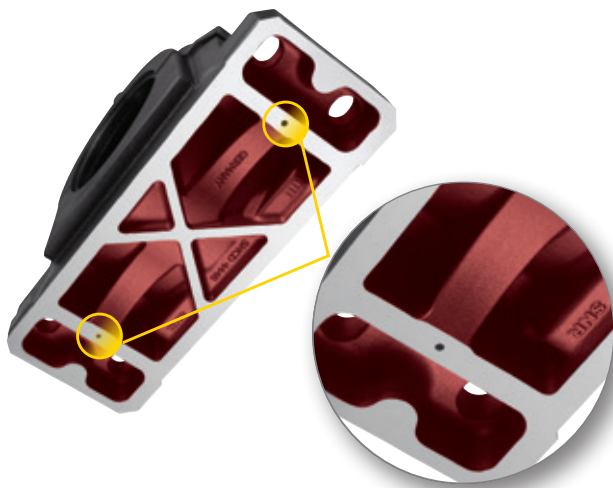
Contact surfaces and markings for additional dowel pins

The foot bolt mounting arrangement is designed for forces acting vertically on the clamping area.

If high axial forces or forces parallel to the clamping area ($>55^\circ$) act against the housing, it must be pinned and/or braced against a shoulder. For this purpose, contact surfaces (2) have been machined into the housing foot. These surfaces also help to ensure precise alignment of the housing on the clamping area.

Locating marks (1) for additional dowel holes are cast in and must be drilled out as needed.

Chapter "Installation" p.20

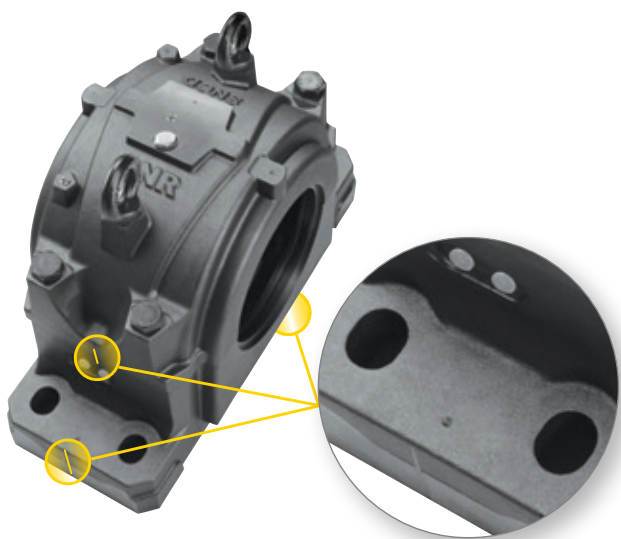


Mounting holes

Alignment errors reduce the operational reliability of the plummer block units and can lead to premature failure of the bearing and the seals.

For very precise alignment, SNCD housings are equipped with mounting holes on the underside of the feet. Dowel pins in the clamping area position the lower section of the housing exactly so the plummer block can be installed without alignment errors.

Chapter "Installation" p.20



Alignment markings

For rough alignment during installation, SNCD housings are marked on the sides. These marks are located under each of the two shaft outlet holes and also on the side of the housing foot. The marks indicate the centre of the bearing seat.

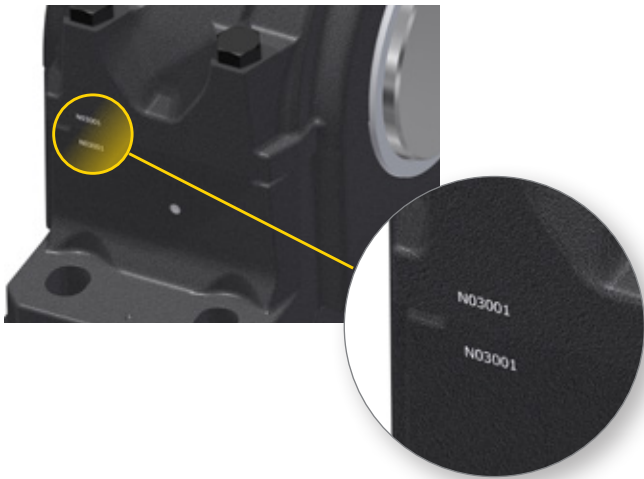
The bearing seat is not centred in the housing.

For the offset, refer to dimension tables page 36, dimension W



Drip edge

The surrounding edge prevents the penetration of moisture at the interface between the upper and lower section.



Upper and lower section marking

The serial numbers imprinted on the side of the housing body are used to correctly assign the upper and lower section. When installing multiple housings, the upper and lower sections must be maintained as pairs and never interchanged, because they are matched during production.



Disassembly edge

Facilitates disassembly for maintenance of bearing units. A lever can be used to easily separate the upper and lower sections of the housing from each other at these points.

Configuration of bearing housings

The use of spherical roller bearings of various dimension ranges and a wide variety of mounting arrangements make it possible to create many different housing configurations from the SNCD modular system.

As standard, SNCD housings are compatible with ISO standard 30 and

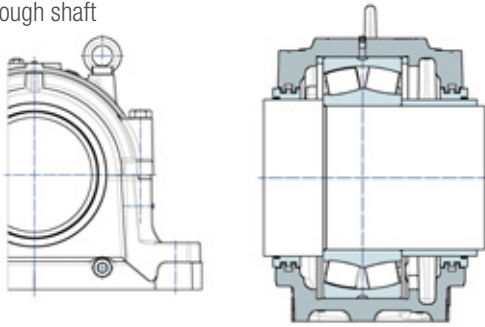
31 sized spherical roller bearings, but they can also be fitted with other ISO standard sized bearings.

The selection of the bearing and the design of the bearing arrangement depend mainly on the type of application

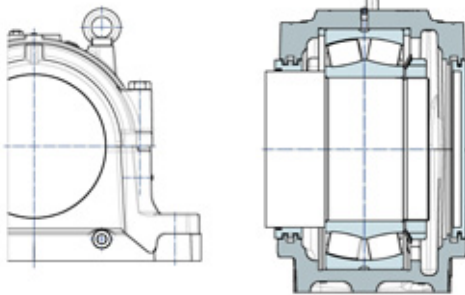
Example 1

SNCD plummer block housing for spherical roller bearings with cylindrical bore / mounted to stepped shaft

A. . Through shaft



B. Shaft end bearing arrangement



Housing for spherical roller bearing with cylindrical bore (version R)

(see also chapter: "Bearing installation", page 20)

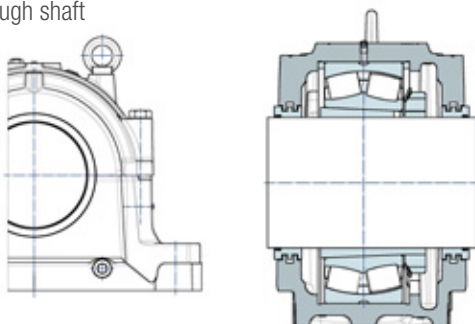
Rolling bearings with a cylindrical bore are mounted directly to the shaft. A shaft tolerance dependent on the application and the bearings used must be selected. The inner ring of the rolling bearing must be supported against a shaft shoulder. The bearing must always be fitted securely to the shaft.

For installing bearings easily, securely and rapidly, we recommend the use of an NTN-SNR induction heating device.

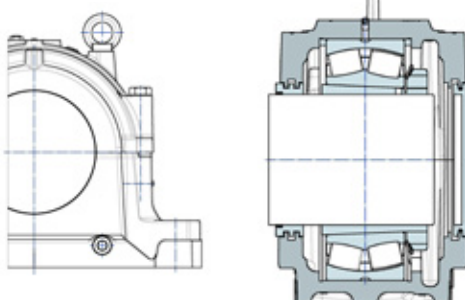
Example 2

SNCD plummer block housing for tapered bore spherical roller bearings with adapter sleeve / mounting to smooth shaft

C. Through shaft



D. Shaft end bearing arrangement



Housing for spherical roller bearing with adapter sleeve

(see also chapter: "Bearing installation", page 20)

Rolling bearings with a tapered bore are mounted on the shaft using an adapter sleeve. The tolerance range of the shaft can be greater than for bearings with a cylindrical bore. Basically, any shafts produced in the tolerance field h9 can be used. The inner ring of the bearing is fixed on the sleeve by axial pre-load, whereby compliance with the specified radial bearing clearance after mounting must be ensured.

For installing bearings easily, securely and rapidly, we recommend the use of NTN-SNR hydraulic nuts.

Information about this can be found on our website under:

SERVICE DEPARTMENT: **Experts
& Tools**

www.ntn-snr.com/services

3. SEAL SYSTEMS

Labyrinth seal TS

Application area

Universal seal for environmental conditions with normal contamination and for applications with high circumferential speeds and/or high ambient temperatures.

Design and function

The labyrinth seal TS comprises a labyrinth ring made of cast iron or steel and a silicone tube.

A non-contact labyrinth with a narrow sealing gap is formed between the radial labyrinth elements of the seal ring and the rectangular sealing groove of the housing.

The labyrinth ring, which can be pushed onto the shaft easily, rotates at the shaft speed. The silicone tube installed between shaft and labyrinth ring ensures that the seal is carried along with the shaft rotation.

The advantage of this non-contact seal system is the unrestricted use of the maximum speed range of the bearing.

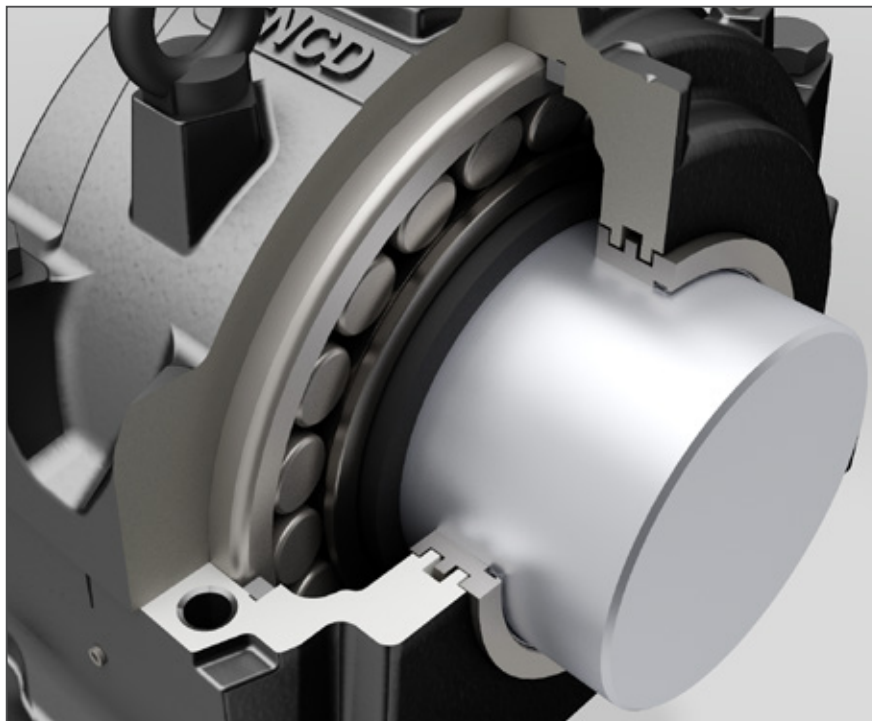
To improve the effectiveness of the seal, lubricant can be applied to the seal gap between labyrinth ring and housing.



For this purpose, two optional grease nipples can be mounted on the upper section of the housing. The positions for the holes are cast into the housing.

Technical data

- Unrestricted suitability for floating bearings
- Maximum permissible misalignment of the shaft: 0.3°
- Operating temperature range: -50°C to +200°C
- Circumferential speed: no restriction



Please note that one seal set must be ordered for each housing side.

The kit contains one labyrinth ring and one silicone tube.

Example of order designation: TS-44

Taconite seal TA

Application area

High-performance seal with maximum reliability under extremely demanding operating conditions. Taconite seals are suitable for use in environments heavily contaminated with dust, stones and spray water.

Design and function

Taconite seals are multiple sealing systems that achieve highly effective sealing through the combination of different sealing concepts.

- Re-lubricatable labyrinth system with axial labyrinth elements
- V-ring seal
- Space completely filled with grease, which serves as a grease barrier

NTN-SNR Taconite seals comprise several components. The stator ring and the rotor ring made of steel represent the two main components. The stator ring is installed in the rectangular sealing groove of the housing. An O-ring located between housing and stator ring serves as a seal and secures the stator ring in the housing.

Acting as a counterpart to the stator ring, the rotor ring is fixed to the shaft. For mounting purposes, it slides easily onto the shaft. The rotor ring is fixed to the shaft in the end position with three radially arranged grub screws.

A protected and greased V-ring, which is mounted to the shaft between the two rings, seals axially against the counterface of the stator ring.

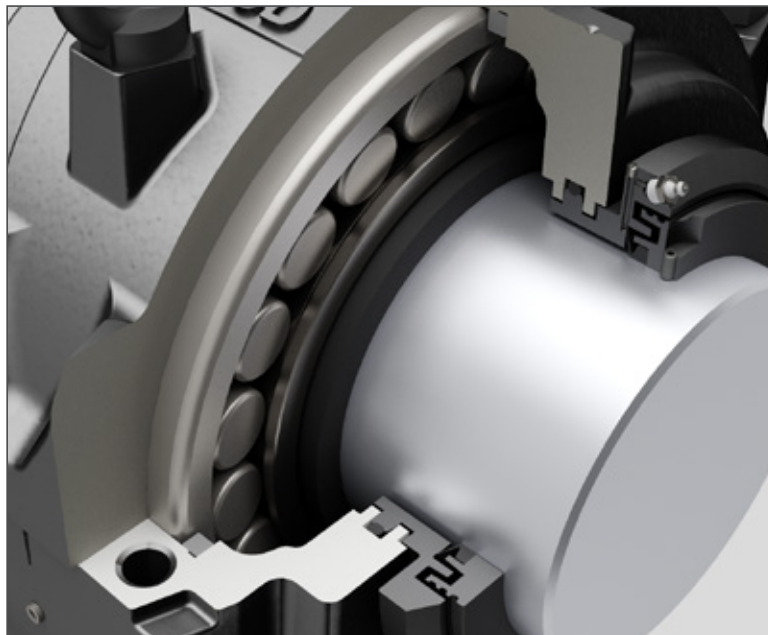


A grease nipple screwed into the stator ring permits optimal greasing of the sealing system, i.e. from the inside towards the outside. The continuous supply of fresh lubricant improves the effectiveness of the seal considerably and extends the service life of the sealing system.

The installation of the Taconite seal requires no additional machining of the housing.

Technical data

- Maximum axial displacement of the shaft:
Limited suitability for floating bearings
 $\pm 2 \text{ mm}$ ($\leq 200 \text{ mm}$ shaft diameter)
 $\pm 4 \text{ mm}$ ($>200 \text{ mm}$ shaft diameter)
- Maximum permissible misalignment of the shaft: 0.3°
- Operating temperature range: -40° C to $+100^\circ \text{ C}$
- Circumferential speed: max. 12 m/s



Please note that one seal set must be ordered for each housing side.

The kit contains one stator ring and one rotor ring along with one O-ring and one V-ring seal.

Example of order designation: TA-44

TE cover

Application area

Covers must be used where shafts end in the housing and no through-shaft arrangement is desired (shaft end bearing arrangement).

Design and function

The covers are made of cast iron or steel and installed in the rectangular sealing grooves of the plummer block housing.

The cover must be installed in a way that the stepped side faces inward. A silicone tube inserted between cover groove and seal groove secures the cover and seals the gap between housing and cover.

Technical data

Operating temperature range: -50°C to +200°C



The kit contains the cover and one silicone tube.

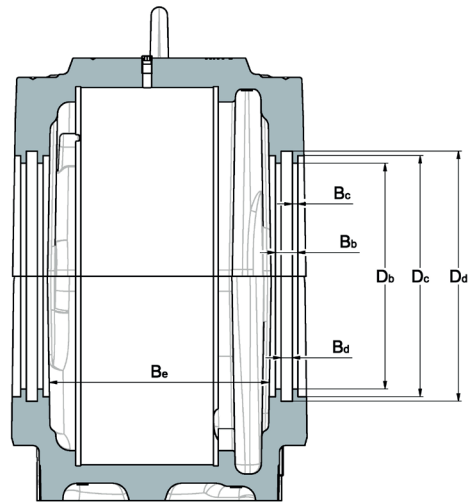
Example of order designation: TE-44

Special seals

SNCD plummer block housings can be used in an extremely wide variety of application areas. As a general rule, the sealing systems of the standard range are well suited for most of those applications. In special cases, however, users must resort to using individually tailored sealing solutions.

The simple adaptation of a customised seal system can be used to modify SNCD housings.

The table provides the housing dimensions required for design purposes.



Housing	Be	Bd	Bc	Bb	Db	Dc	Dd
SNCD3036	158	11	5.5	22	181.2	196.4	205.2
SNCD3038	169	11	5.5	22	191.4	206.4	215.4
SNCD3040	187	11	5.5	22	201.4	216.4	225.4
SNCD3044	207	11	5.5	22	221.4	236.4	245.4
SNCD3048	215	11	5.5	22	241.4	256.4	265.4
SNCD3052	229	11	5.5	22	261.6	276.6	285.6
SNCD3056	249	11	5.5	22	281.6	296.6	305.6
SNCD3060	249	11	5.5	22	301.6	316.8	325.6
SNCD3064	280	11	5.5	22	321.8	336.8	345.8
SNCD3068	300	11	5.5	22	342.4	357.4	366.4
SNCD3072	300	11	5.5	22	362.4	377.4	386.4
SNCD3076	326	11	5.5	22	382.4	397.4	406.4
SNCD3080	327	11	5.5	22	402.8	417.8	426.8
SNCD3084	327	11	5.5	22	422.8	437.8	446.8
SNCD3088	358	11	5.5	22	442.8	457.8	466.8
SNCD3092	387	11	5.5	22	463	478	487
SNCD3096	386	11	5.5	22	483	498	507
SNCD30/500	384	11	5.5	22	503	518	527

SNCD3134	159	11	5.5	22	171.2	186.4	195.2
SNCD3136	169	11	5.5	22	181.2	196.4	205.2
SNCD3138	187	11	5.5	22	191.4	206.4	215.4
SNCD3140	207	11	5.5	22	201.4	216.4	225.4
SNCD3144	216	11	5.5	22	221.4	236.4	245.4
SNCD3148	230	11	5.5	22	241.4	256.4	265.4
SNCD3152	249	11	5.5	22	261.6	276.6	285.6
SNCD3156	247	11	5.5	22	281.6	296.6	305.6
SNCD3160	278	11	5.5	22	301.6	316.8	325.6
SNCD3164	295	11	5.5	22	321.8	336.8	345.8
SNCD3168	327	11	5.5	22	342.4	357.4	366.4
SNCD3172	327	11	5.5	22	362.4	377.4	386.4
SNCD3176	327	11	5.5	22	382.4	397.4	406.4
SNCD3180	358	11	5.5	22	402.8	417.8	426.8
SNCD3184	387	11	5.5	22	422.8	437.8	446.8
SNCD3188	385	11	5.5	22	442.8	457.8	466.8

Housing	Be	Bd	Bc	Bb	Db	Dc	Dd
SNCD3036R	156	11	5.5	22	221.4	236.4	245.4
SNCD3038R	168	11	5.5	22	221.4	236.4	245.4
SNCD3040R	184	11	5.5	22	241.1	256.4	265.4
SNCD3044R	204	11	5.5	22	261.6	276.6	285.6
SNCD3048R	214	11	5.5	22	281.6	296.6	305.6
SNCD3052R	228	11	5.5	22	301.6	316.8	325.6
SNCD3056R	248	11	5.5	22	321.8	336.8	345.8
SNCD3060R	248	11	5.5	22	342.4	357.4	366.4
SNCD3064R	279	11	5.5	22	362.4	377.4	386.4
SNCD3068R	299	11	5.5	22	382.4	397.4	406.4
SNCD3072R	299	11	5.5	22	402.8	417.8	426.8
SNCD3076R	326	11	5.5	22	422.8	437.8	446.8
SNCD3080R	326	11	5.5	22	463	478	487
SNCD3084R	325	11	5.5	22	483	498	507
SNCD3088R	355	11	5.5	22	503	518	527
SNCD3092R	384	11	5.5	22	533	548	557
SNCD3096R	384	11	5.5	22	533	548	557
SNCD30/500R	383	11	5.5	22	563	578	587

SNCD3134R	158	11	5.5	22	201.4	216.4	225.4
SNCD3136R	168	11	5.5	22	221.4	236.4	245.4
SNCD3138R	187	11	5.5	22	221.4	236.4	245.4
SNCD3140R	204	11	5.5	22	241.4	256.4	265.4
SNCD3144R	215	11	5.5	22	261.6	276.6	285.6
SNCD3148R	229	11	5.5	22	281.6	296.6	305.6
SNCD3152R	249	11	5.5	22	301.6	316.8	325.6
SNCD3156R	249	11	5.5	22	321.8	336.8	345.8
SNCD3160R	277	11	5.5	22	342.4	357.4	366.4
SNCD3164R	300	11	5.5	22	362.4	377.4	386.4
SNCD3168R	326	11	5.5	22	382.4	397.4	406.4
SNCD3172R	327	11	5.5	22	402.8	417.8	426.8
SNCD3176R	326	11	5.5	22	422.8	437.8	446.8
SNCD3180R	357	11	5.5	22	463	478	487
SNCD3184R	386	11	5.5	22	483	498	507
SNCD3188R	384	11	5.5	22	503	518	527

Seal selection for SNCD large plummer block housings

SNCD plummer block housings can be equipped with labyrinth seals (TS) or Taconite seal systems (TA).

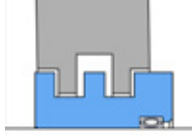
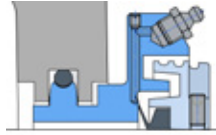
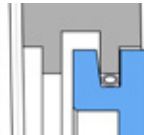
The following table lists the seals of the standard range along with their characteristics and implementation options.

Housings to be used in a shaft end bearing arrangement can be closed off on one side with a cover (TE).

Seals and covers comprise multiple components and are packaged as sets. One seal set is required for each housing side.

Please note that seals must be ordered separately from the housing.

++	well-suited
+	suitable
(+)	somewhat suitable
--	not suitable
x	not applicable

	Labyrinth seal	Taconite seal	Cover
			
Designation	TS	TA	TE

GENERAL

Seal materials	Steel or cast iron, silicone	Steel, NBR	Steel or cast iron, silicone
Seal set contents	1x labyrinth ring 1x silicone tube	1x stator ring 1x rotor ring 1x O-ring 1x V-Ring 1x grease nipple	1x cover 1x silicone tube

SHAFT CONFIGURATION

Diameter tolerance		h8 (h9)	h8 (h9)	x
Surface roughness	μ	Ra 3.2	Ra 3.2	x

APPLICATION-SPECIFIC SPECIFICATIONS

Operating temperature	°C	-50 to +200	-40 to +100	-50 to +200
	°F	-58 to +392	-40 to +212	-58 to +392
Circumferential speed	m/s	No restriction	max. 12	x
Misalignment	Grad	max. 0,3	max. 0,3	x
Floating bearing suitability	mm	++	+ ±2 (≤ 200 mm shaft diameter) ±4 (>200 mm shaft diameter)	Note min. distance from the end of the shaft (dimension table dimension g1)
Seal grease supply		Optional supply via hole in housing	Direct supply	x
Low friction		++	+	x
Vertical installation		--	(+)	++

SEAL INTEGRITY IN CONTACT WITH:

Spray water / moisture	--	++	++
Dust	(+)	++	++
Material: fine, solid	+	++	++
Material: coarse, solid	+	++	++
Material: sharp-edged	++	++	++
UV resistance	++	++	++

4. LUBRICATION

Grease

SNCD plummer block housings are designed for grease-lubricated bearings only. The selection of the correct types of grease and the service life of the lubricant must be determined on the basis of the requirements during operation. Operating temperatures, speeds and loads, as well as the external ambient conditions where the equipment is to be located, are the key parameters that the plant operator must take into consideration.

The service life of the grease must be determined based on the specific operating conditions. Under normal operating conditions, it is often possible to dispense with re-lubrication intervals, because the quantity of grease applied remains in the housing till the final replacement of the lubricant.

To determine the lubrication interval, a grease analysis can be useful.



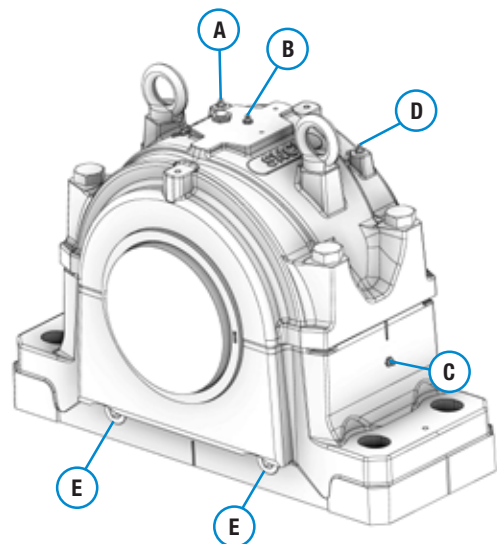
Quantities of grease for initial filling

The quantities of grease listed in the table on page 17 suffice for commissioning and for operation under normal operating conditions.

Lack of lubricant or excess lubricant can cause the rolling bearing to malfunction. When filling with grease for the first time, the recommended quantity should be used.

Before filling the housing with grease, however, the bearing must first be filled completely with grease. When labyrinth seals are used, the seal grooves of the upper and lower sections of the housing must also be filled with grease.

Then the quantity specified for the initial filling as listed in the table should be added to the housing. The quantity of grease represents about 60% of the open space in the housing and must be added primarily to the space opposite the grease escape bores.



Re-lubrication

In case of lateral re-lubrication via position (A) or (D), grease escape bores (E) should be open in order to allow the used grease to escape. Unless otherwise specified, we recommend using the same quantity of grease for re-lubrication as for the initial filling.

When re-lubricating spherical roller bearings via the lubrication groove on the outer ring (suffix D1 or W33), the quantity of grease needed can be determined from the information provided on the **ULTAGE spherical roller bearings** catalogue. In that case, we recommend adding the lubricant via position (B) or (C).

Lubricant replacement

If a plummer block housing must be opened – which may be necessary in the context of scheduled maintenance, for example, or when installing a new bearing – all of its grease should be replaced. In this case, the entire interior and the seal grooves must be cleaned.



Grease quantity table

The quantities of grease listed suffice for the initial filling of the housing, the bearing and the Taconite seals. The bearing and the seals will be filled 100%. The fill quantity in the housing corresponds to about 60% of the free space in the housing.

SNCD series 31	Fill quantities	
	[kg]	[ccm]
SNCD3134	1.9	2100
SNCD3136	2.3	2600
SNCD3138	3.0	3300
SNCD3140	3.9	4300
SNCD3144	4.3	4800
SNCD3148	5.5	6200
SNCD3152	7.0	7800
SNCD3156	7.5	8400
SNCD3160	10.5	11800
SNCD3164	11.3	12600
SNCD3168	15.5	17400
SNCD3172	16.8	18800
SNCD3176	17.1	19200
SNCD3180	21.9	24500
SNCD3184	27.5	30900
SNCD3188	28.9	32400

SNCD series 30	[kg]	[ccm]
SNCD3036	2.0	2200
SNCD3038	2.3	2600
SNCD3040	2.8	3100
SNCD3044	3.7	4200
SNCD3048	4.4	4900
SNCD3052	5.8	6500
SNCD3056	7.0	7900
SNCD3060	7.6	8500
SNCD3064	10.4	11700
SNCD3068	13.0	14600
SNCD3072	12.8	14400
SNCD3076	15.8	17700
SNCD3080	17.1	19200
SNCD3084	18.2	20400
SNCD3088	22.3	25000
SNCD3092	27.6	31000
SNCD3096	26.5	29700
SNCD30/500	27.3	30600

The calculation of the weight specifications refer to the NTN-SNR Lubricant **UNIVERSAL MULTI PURPOSE** (Density: 0,89 g /cm³)

Optimal protection for lubrication supply in harsh environments: The Heavy-Duty Installations Kit for DRIVE BOOSTER



Central lubrication systems

NTN-SNR has worked with POLIPUMP to develop a **high-performance, cost-effective and easy to use multi-point lubrication solution**. Installed in only 4 steps (no technical skills required), the POLIPUMP enables really simple lubrication from 1 to 35 points (depending on the model) and at a distance of up to 20 metres.



For all questions concerning maintenance and lubrication our service engineers will be pleased to help you. NTN-SNR offers a broad range of greases and lubrication systems.

Grease nipples and lubricant supply

SNCD plummer block housings can be lubricated via grease nipples. The grease nipples (one flat head and conical head) are included with the delivery and packaged inside the housing. A reducer is also included, which can be used for easy installation of lubricators.

Housings are delivered with all lubrication holes plugged with threaded plugs.



1x flat head grease nipple DIN 3404 M10x1

Hex wrench size: 17



1x conical head grease nipple DIN 71412 AM10x1

Hex wrench size: 11



1x reducer G1/4 - M10x1

e.g. for connecting NTN-SNR DRIVE BOOSTER automatic lubricators

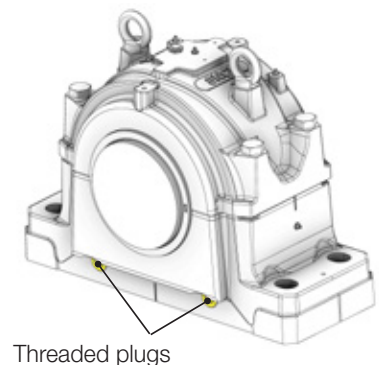
Hex wrench size: 17



2x threaded plug DIN 906

Threaded plugs, grease escape bores

SNCD series 31	SNCD series 30	Threaded plugs DIN 906	Hex wrench size (WAF)
3134	3036	M30 x 1.5	17
3136	3038	M30 x 1.5	17
3138	3040	M30 x 1.5	17
3140	3044	M30 x 1.5	17
3144	3048	M36 x 1.5	19
3148	3052	M36 x 1.5	19
3152	3056	M36 x 1.5	19
3156	3060	M36 x 1.5	19
3160	3064	M36 x 1.5	19
3164	3068/3072	M42 x 1.5	22
3168	3076	M42 x 1.5	22
3172	3080	M42 x 1.5	22
3176	3084	M42 x 1.5	22
3180	3088	M42 x 1.5	22
3184	3092/3096	M42 x 1.5	22
3188	30/500	M42 x 1.5	22



For information about automatic lubricators and lubricants, please refer to the NTN-SNR website under: Products / Maintenance tools / Lubrication



5. INSTALLATION

Installation preparations and safety instructions

To prevent injury and material damage during installation, observe the general safety instructions and follow the installation manual.

- Ensure that the installation is carried out in a dust-free and dry environment.
- Clean the workplace and the installation area prior to commencing the installation. Work with clean tools and be familiar with all safety instructions of the equipment to be used during installation.
- Compressed air must not be used in the installation area (exception: air-operated wrench).

- Do not remove bearings, adapter sleeves or locating rings from the original packaging till ready to proceed with their installation.
- Degrease and/or clean the shaft and sleeves as well as the interior of the housing.



Do not wash bearings!

Installation instructions for SNCD plummer block housings

• Off-centre bearing seat

When installing the SNCD plummer block housing, note that the installed bearing is not positioned at the centre of the housing. The bearing seat is offset from the centreline. The markings on the side of the housing foot indicate the centre of the bearing seat (see dimension table from page 36).

• Installation position of bearings with an adapter sleeve

When installing bearings with adapter sleeves, observe the correct installation position within the housing. Due to package space considerations, mount the slotted nut on the side with the grease escape bores.

• Cover position

Install cover TE on the side with the grease escape bores.

• Lifting housings

The two eye bolts (DIN 580) in the upper section of the housing can be used to lift the housing. They can carry the weight of a fully equipped housing. Do not use the eye bolts to lift additionally mounted machine components (shafts, rotors, rollers, etc.).



Before lifting, inspect eye bolts for damage and secure seating.

• Fixing the housings in place

Fastening by means of foot bolts is designed for forces acting vertically on the clamping area. If high axial forces or forces acting parallel to the clamping area between 55° and 120° are expected, the housing must be fastened in place with additional dowel pins and/or braced against shoulders.

(SNCD housings are equipped with marks for dowel pin holes and machined shoulders, see table on page 24).

• Substructure

For trouble-free operation of the bearing assembly, the substructure to which the housing is to be mounted must be adequately sized. It must be able to withstand the expected loads safely and reliably during operation and at standstill.

• Clamping area

In order to be able to absorb maximum loads, the housings must lie in full contact with the clamping areas. The contact area must be clean, paint-free and flat (flatness tolerance min. IT7; measured across the diagonal). For the clamping area, we recommend a surface roughness of $Ra \leq 12.5 \mu m$.

• Paired housing sections

When installing multiple housings at the same time, the upper and lower sections must be maintained as pairs and never interchanged. Prior to assembly, verify that the upper and lower housing sections have matching serial numbers. Those numbers are located on the side of the housing along the joint face.

Bearing installation

Installation errors are a common cause of premature bearing failures. For this reason, we recommend following the installation instructions very carefully to ensure proper installation of the rolling bearings. The use of the right tools is also a prerequisite.

NTN-SNR offers useful accessories, which facilitate installation and prevent bearing damage.

Installation of bearings with a cylindrical bore / installation on stepped shaft

In the installation of cylindrical bore rolling bearings, a distinction is drawn between warm and cold installation. Due to their size, bearings for the SNCD series should be pushed onto the shaft only while warm.

The use of an induction heater from NTN-SNR makes it possible to heat the bearing up to the specified temperature and ensures a trouble-free and proper installation.

Bearings with a cylindrical bore are mounted with a tight fit against a shaft shoulder. A spacer sleeve, which compensates for the shaft shoulder, is

pushed up against the inner ring of the bearing. Since the sleeve serves as a seal seat, it must extend far enough beyond the housing to ensure correct installation of the seal.

Sleeves are not accessories and must be fabricated by the user. SNCD housings for shaft end bearing arrangements do not require spacer sleeves.

Installation of bearings with a tapered bore / installation on smooth shaft

In SNCD large plummer block housings, bearings with a tapered bearing seat are secured to a smooth shaft by means of an adapter sleeve. Pressing the bearing onto the adapter sleeve imparts radial pre-tension between bearing inner ring, sleeve and shaft. This minimises the radial clearance in the bearing. The correct position of the bearing is determined by the displacement and/or the residual bearing clearance.

High forces must be applied in this installation method, so larger diameter shafts require hydraulic assistance.

Hydraulic nuts (HMV...EBF)

This tool uses the hydraulic principle to generate very high forces.

The bearing can be displaced axially in a controlled and safe manner.

The secure seating of the bearing on the adapter sleeve is defined by the axial displacement. The table on page 22 lists the radial clearance reduction and axial displacement.

Oil injection method

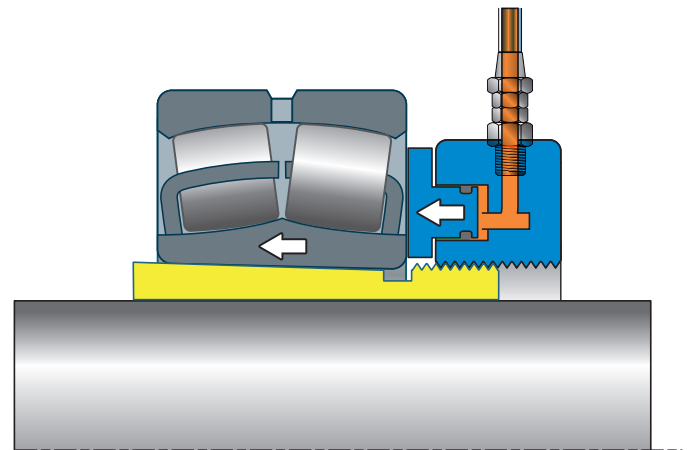
Via the oil injection connector of a special adapter sleeve, a hydraulic pump injects oil between the adapter sleeve and the rolling bearing.

The resulting oil film in the press-fit joint reduces friction and lowers the required mounting forces.

Adapter sleeves with an oil injection connector are available for shaft diameters starting from 200 mm.

Suffix H

Example: **H3156H**



Installation of a bearing on an adapter sleeve using a hydraulic nut



For complete information about the installation of spherical roller bearings and an overview of our installation tools, please refer to our ULTAGE catalogue DOC.I_SRBULTAGE_CAT1 and to our maintenance catalogue DOC.I_TOOL_CAT1.

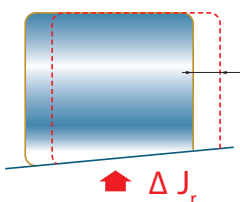
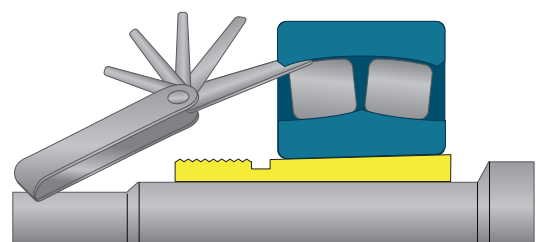
Radial clearance reduction and axial displacement for spherical roller bearings on a 1:12 taper

Nominal bearing bore diameter [mm]		Radial clearance before installation, internal clearance group according to ISO 5753 [mm]						Reduction of radial clearance [mm]		Axial displacement along taper 1:12 [mm]		Control value of the smallest radial clearance after installation [mm]		
d		Normal		C3		C4						Internal clearance group		
>	≤	min	max	min	max	min	max	min	max	min	max	normal	C3	C4
100	120	0,1	0,135	0,135	0,17	0,17	0,22	0,055	0,065	0,8	0,9	0,35	0,07	0,105
120	140	0,12	0,16	0,16	0,2	0,2	0,26	0,065	0,075	0,9	1	0,045	0,085	0,125
140	160	0,13	0,18	0,18	0,23	0,23	0,3	0,075	0,09	1	1,2	0,04	0,09	0,14
160	180	0,14	0,2	0,2	0,26	0,26	0,34	0,08	0,1	1,1	1,4	0,04	0,1	0,16
180	200	0,16	0,22	0,22	0,29	0,29	0,37	0,09	0,11	1,2	1,5	0,05	0,11	0,18
200	225	0,18	0,25	0,25	0,32	0,32	0,41	0,11	0,13	1,5	1,8	0,05	0,12	0,19
225	250	0,2	0,27	0,27	0,35	0,35	0,45	0,12	0,14	1,6	1,9	0,06	0,13	0,21
250	280	0,22	0,3	0,3	0,39	0,39	0,49	0,13	0,16	1,6	2,1	0,06	0,14	0,23
280	315	0,24	0,33	0,33	0,43	0,43	0,54	0,15	0,18	1,9	2,4	0,06	0,15	0,25
315	355	0,27	0,36	0,36	0,47	0,47	0,59	0,16	0,19	2,1	2,5	0,08	0,17	0,28
355	400	0,3	0,4	0,4	0,52	0,52	0,65	0,18	0,22	2,3	3	0,08	0,18	0,3
400	450	0,33	0,44	0,44	0,57	0,57	0,72	0,21	0,25	3	3,6	0,08	0,19	0,32
450	500	0,37	0,49	0,49	0,63	0,63	0,79	0,21	0,26	3,3	4	0,19	0,23	0,35
500	560	0,41	0,54	0,54	0,68	0,68	0,87	0,24	0,3	3,7	4,6	0,17	0,25	0,36

Ratio of the axial offset (a) of a rolling bearing with tapered bore to the corresponding reduction of its clearance ΔJ_r :

Taper 1/12

$$a = 12 \Delta J_r / t_i$$



a = axial displacement

ΔJ_r = radial clearance reduction

t_i = inner ring press fit factor:

$t_i = 0.75$ if the rolling bearing is mounted directly to a solid shaft taper journal.

$t_i = 0.7$ if the rolling bearing is mounted to a tapered sleeve.

Housing breaking loads and load capacity of connecting bolts

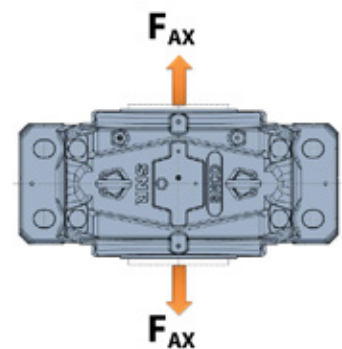
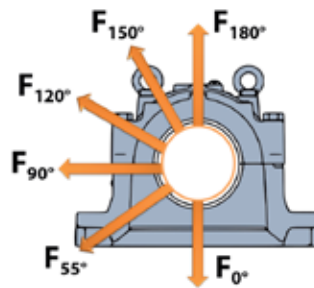
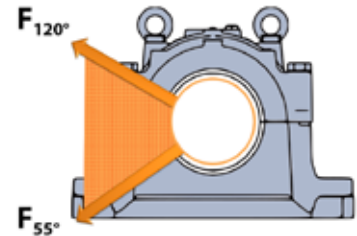
The following table lists the housing breaking loads as well as the maximum load capacity of connecting bolts between upper and lower sections. The allowable loads can be determined as a function of the loading orientations and of the safety factor selected for the relevant operating conditions. As a general rule, a safety factor of 6 is applied in machinery construction.

Clamping area

- Clean and paint-free
- Flatness (flatness tolerance min. IT7; measured across the diagonal)
- Surface roughness $R_a \leq 12.5 \mu\text{m}$

Substructure

- Full contact of the housing foot. (If the housing is supported only laterally under the foot bolts, use the breaking loads for F_{0° .)
- To safely absorb the imparted loads, apply the specified tightening torques of the foot and connecting bolts (page 25). The installation surface must have high stability and strength. Any deformation of the substructure can reduce operational reliability and shorten the service life of the bearing unit.
- Arrangement to support the housing under high axial loads, as well as under forces with a load angle between 55° and 120° .



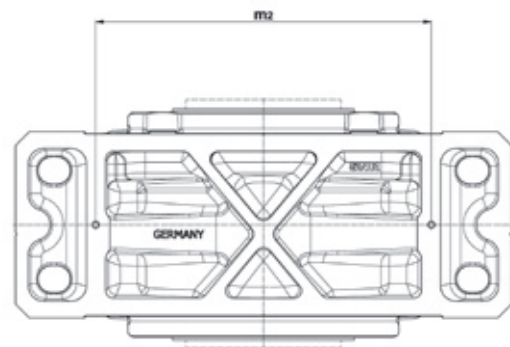
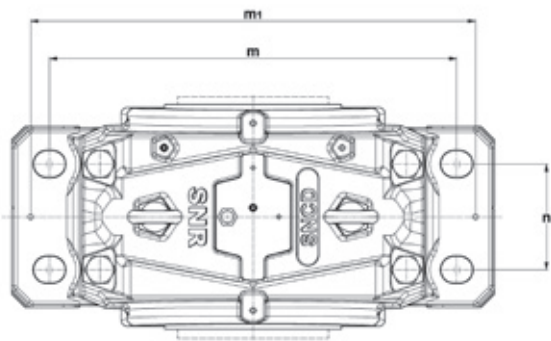
		Housing breaking loads in the load direction [kN]							Maximum load capacity of the four connecting bolts in the load direction [kN]		
SNCD series 31	SNCD series 30	F_{0°	F_{55°	F_{90°	F_{120°	F_{150°	F_{180°	F_{ax}^*	F_{120°	F_{150°	F_{180°
3134	3036	3060	3780	1800	1360	1220	1530	990	800	460	400
3136	3038	3420	4320	2070	1530	1360	1710	1116	800	460	400
3138	3040	3960	4860	2340	1800	1580	1980	1278	800	460	400
3140	3044	4600	5700	2800	1900	1800	2800	1512	800	460	400
3144	3048	5500	7200	3400	2500	2300	2800	1800	800	460	400
3148	3052	6100	7500	3600	2700	2500	3000	1980	1300	750	650
3152	3056	6800	8400	4100	3000	2700	3400	2160	1300	750	650
3156	3060	7200	9000	4300	3200	2800	3600	2340	1300	750	650
3160	3064	8600	10800	5200	3900	3400	4300	2700	1300	750	650
3164	3068/3072	9700	12600	6100	4500	3900	5000	3240	1300	750	650
3168	3076	9700	12600	6100	4500	3900	5000	3420	1800	1040	900
3172	3080	10800	13500	6400	4600	4100	5400	3600	1800	1040	900
3176	3084	10800	13800	6400	4800	4300	5400	3600	1800	1040	900
3180	3088	10900	14400	7000	5200	4500	5700	3740	1800	1040	900
3184	3092/3096	12160	15360	7360	5440	4800	6080	3840	2300	1330	1150
3188	30/500	12800	16000	7680	5760	4960	6400	4000	2300	1330	1150

* The allowable axial load of the bearing and/or the clamping force of the bearing/sleeve connection must not be exceeded

Housing mounting

Dimensions of dowel pins and housing mounting points

Dimensions in mm		Bolt holes		Dowel pins		Mounting holes		
SNCD series 31	SNCD series 30	m	n	m1	max. Ø	m2	Ø	Depth
3134	3036	430	100	470	20	333	6	15
3136	3038	450	110	490	20	365	8	15
3138	3040	480	120	520	20	390	8	15
3140	3044	510	130	560	20	410	8	15
3144	3048	540	140	590	20	433	8	15
3148	3052	600	150	650	20	500	10	15
3152	3056	650	160	720	20	540	10	15
3156	3060	670	160	740	20	550	10	15
3160	3064	710	190	770	25	600	10	15
3164	3068/3072	750	200	820	25	630	12	15
3168	3076	810	220	880	25	680	12	15
3172	3080	840	220	920	30	700	12	15
3176	3084	870	220	960	30	720	14	15
3180	3088	950	240	1020	35	780	14	15
3184	3092/3096	1000	260	1070	35	840	14	20
3188	30/500	1030	260	1120	35	840	14	20

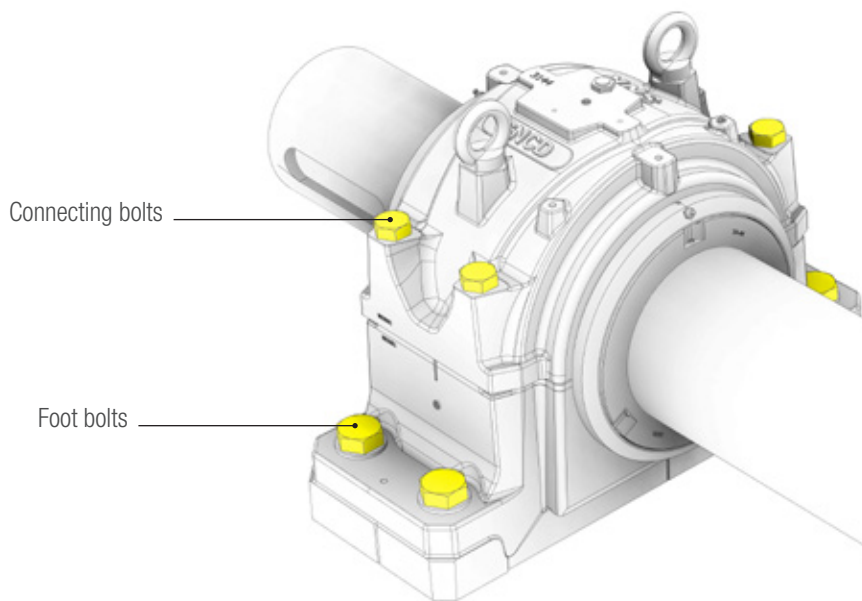


Mounting holes

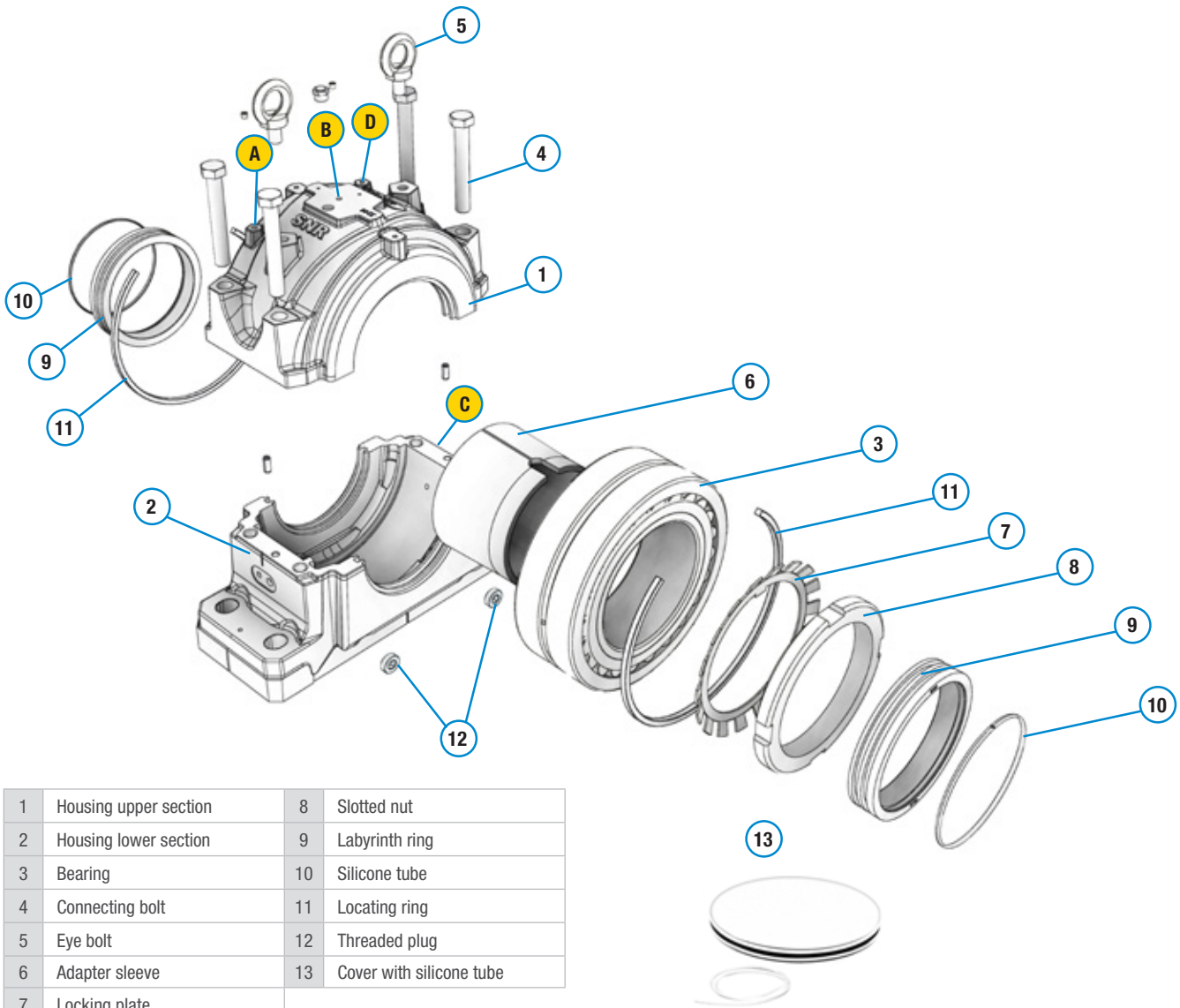
For very precise alignment, SNCD housings are equipped with mounting holes on the underside of the feet. Dowel pins in the clamping area position the lower section of the housing exactly so the plummer block can be installed without alignment errors.

Recommended tightening torques for connecting and foot bolts

SNCD series 31	SNCD series 30	Connecting bolts		Foot bolts			
		Material 8.8	Tightening torque [Nm]	Material 8.8	Tightening torque [Nm]	Grade 5	Tightening torque [lbf-in]
3134	3036	M24x140	440	M24	500	1 " UNC	4400
3136	3038	M24x150	440	M24	500	1 " UNC	4400
3138	3040	M24x150	440	M24	500	1 " UNC	4400
3140	3044	M24x160	440	M30	1005	1 1/4 " UNC	8800
3144	3048	M24x160	440	M30	1005	1 1/4 " UNC	8800
3148	3052	M30x180	870	M30	1005	1 1/4 " UNC	8800
3152	3056	M30x220	870	M36	1750	1 1/2 " UNC	15000
3156	3060	M30x220	870	M36	1750	1 1/2 " UNC	15000
3160	3064	M30x220	870	M36	1750	1 1/2 " UNC	15000
3164	3068/3072	M30x240	870	M36	1750	1 1/2 " UNC	15000
3168	3076	M36x250	1520	M36	1750	1 1/2 " UNC	15000
3172	3080	M36x250	1520	M36	1750	1 1/2 " UNC	15000
3176	3084	M36x250	1520	M36	1750	1 1/2 " UNC	15000
3180	3088	M36x250	1520	M42	2800	1 3/4 " UNC	24700
3184	3092/3096	M42x280	2430	M42	2800	1 3/4 " UNC	24700
3188	30/500	M42x280	2430	M42	2800	1 3/4 " UNC	24700



6. INSTALLATION OF LABYRINTH SEAL TS



1	Housing upper section	8	Slotted nut
2	Housing lower section	9	Labyrinth ring
3	Bearing	10	Silicone tube
4	Connecting bolt	11	Locating ring
5	Eye bolt	12	Threaded plug
6	Adapter sleeve	13	Cover with silicone tube
7	Locking plate		

INSTALLATION INSTRUCTIONS

- **To prevent injury and material damage during installation, please also observe the following chapters of this catalogue.**
 - Installation preparations and safety instructions (page 20)
 - Installation instructions for SNCD plummer block housings (page 20)
- **Clamping area recommendations**
 - Flatness tolerance min. IT7; measured across the foot diagonal
 - Surface roughness: $Ra \leq 12.5 \mu m$
- **Installation of bearing with slotted nut (adapter sleeve; shaft end bearing arrangement)**

Due to package space considerations, fit the slotted nut on the side with the grease drain holes.

• Housing with TE cover

If the shaft ends with a housing, the latter can be closed off with a TE cover. The cover is installed in the seal groove of the housing on the side of the grease drain hole.

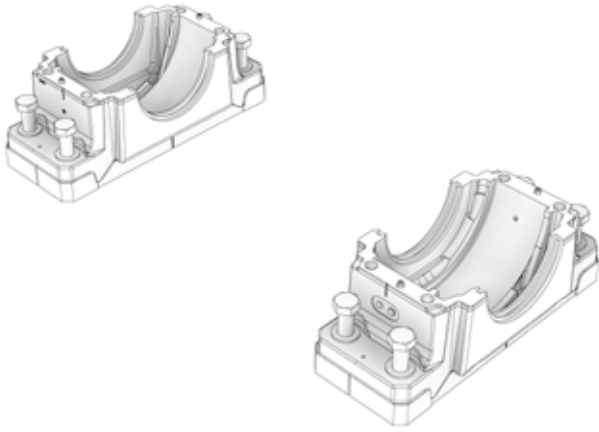
• Grease nipple position A – D

The lubricant supply points (A) and (D) in the top of the housing are designed for lubricating laterally through the bearing or for bearings without a circumferential groove and lubricating holes in the outer ring. For bearings that permit re-lubrication via the outer ring, it is better to use lubricant supply points (B) or (C).

• Shaft misalignment

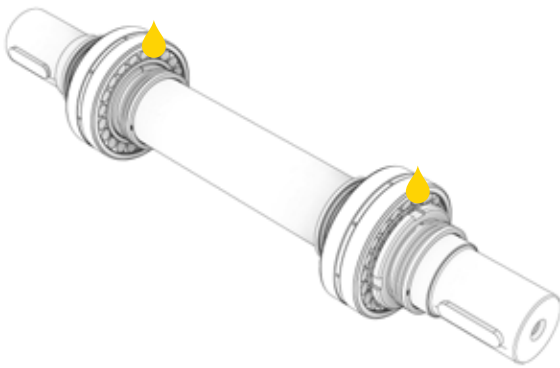
Maximum permissible misalignment of the shaft: 0.3°

INSTALLATION STEPS



- 1 Position the lower housing sections (2) securely. During installation, note that the bearing is not centred in the housing. The markings on the side of the lower section of the housing indicate the centre of the bearing seat.

Tighten the foot bolts lightly by hand.



- 2 Slide the inner labyrinth rings (9) onto the shaft. Mount the rings so that the grooves for the silicone tubes face towards the outside of the housing.

Then mount the bearings (3) to the shaft as described in the chapter “**Bearing installation**” and fill them completely with grease. Finally, slide the outer labyrinth rings onto the shaft in the correct installation orientation (page 20).

If the end of the shaft is inside the housing, use only one labyrinth seal. In this case, install the TE cover (13) in place of the second seal.

- 3 **INSTALLATION OF THE SHAFT IN THE HOUSING**
(With bearings and seal components)

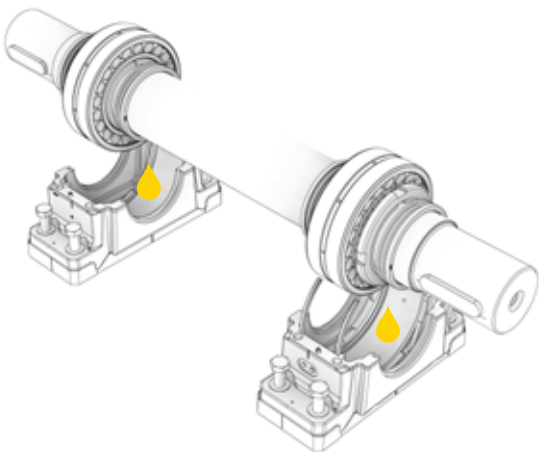
Insertion of the assembly in a floating bearing configuration

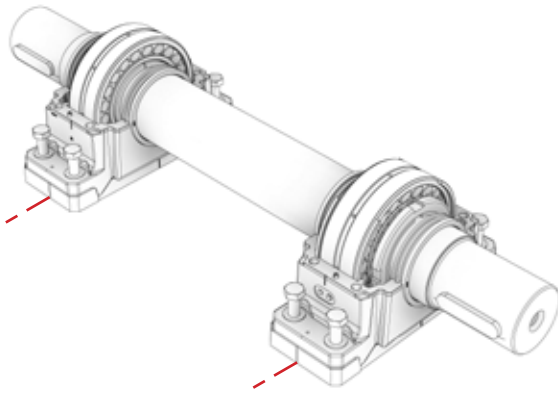
Apply grease uniformly to the seal grooves of the upper and lower housing sections (1) + (2) (except where covers are installed). Place the pre-mounted shaft into the lower sections while carefully guiding the labyrinth seals (9) into the seal grooves of the lower housing sections. Position the bearing in the centre of the bearing seat. Distribute the required quantity of grease (table on page 17) in the upper and lower housing sections while applying lubricant primarily to the space opposite the grease drain hole.

Insertion of the assembly in a fixed bearing configuration

Apply grease uniformly to the seal grooves of the upper and lower housing sections (1) + (2) (except where covers are installed). Install locating rings (11) in the lower housing section and slide them up against the outer edges of the bearing seat (for number of rings, refer to dimension table from page 36). Arrange the rings to position the bearing in the centre of the bearing seat. Rotate the locating rings to move their openings to the top.

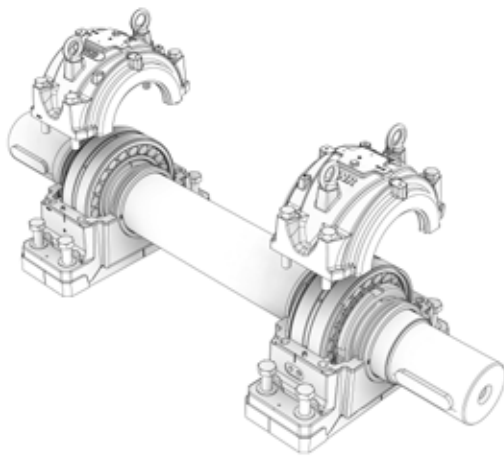
Place the pre-mounted shaft into the lower sections while carefully guiding the labyrinth seals into the seal grooves of the lower housing sections. Distribute the required quantity of grease (table on page 17) in the upper and lower housing sections while applying lubricant primarily to the space opposite the grease drain hole.



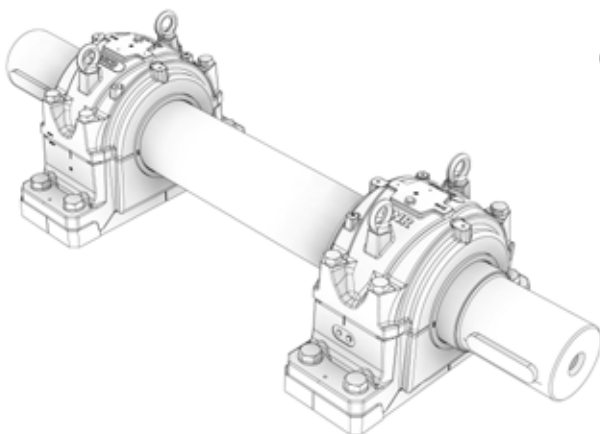


- 4** Use the alignment markings and the machined contact surfaces to correctly position the lower housing sections **(2)** and then securely tighten the foot bolts evenly in a cross pattern (table page 25).

If the TE cover **(13)** is used, install it in the seal groove together with the silicone tube provided



- 5** Place the housing upper sections **(1)** on the lower sections **(2)**. Verify that the housing section pairs are marked identically. Evenly tighten the connecting bolts **(4)** in a cross pattern (Table page 25.)

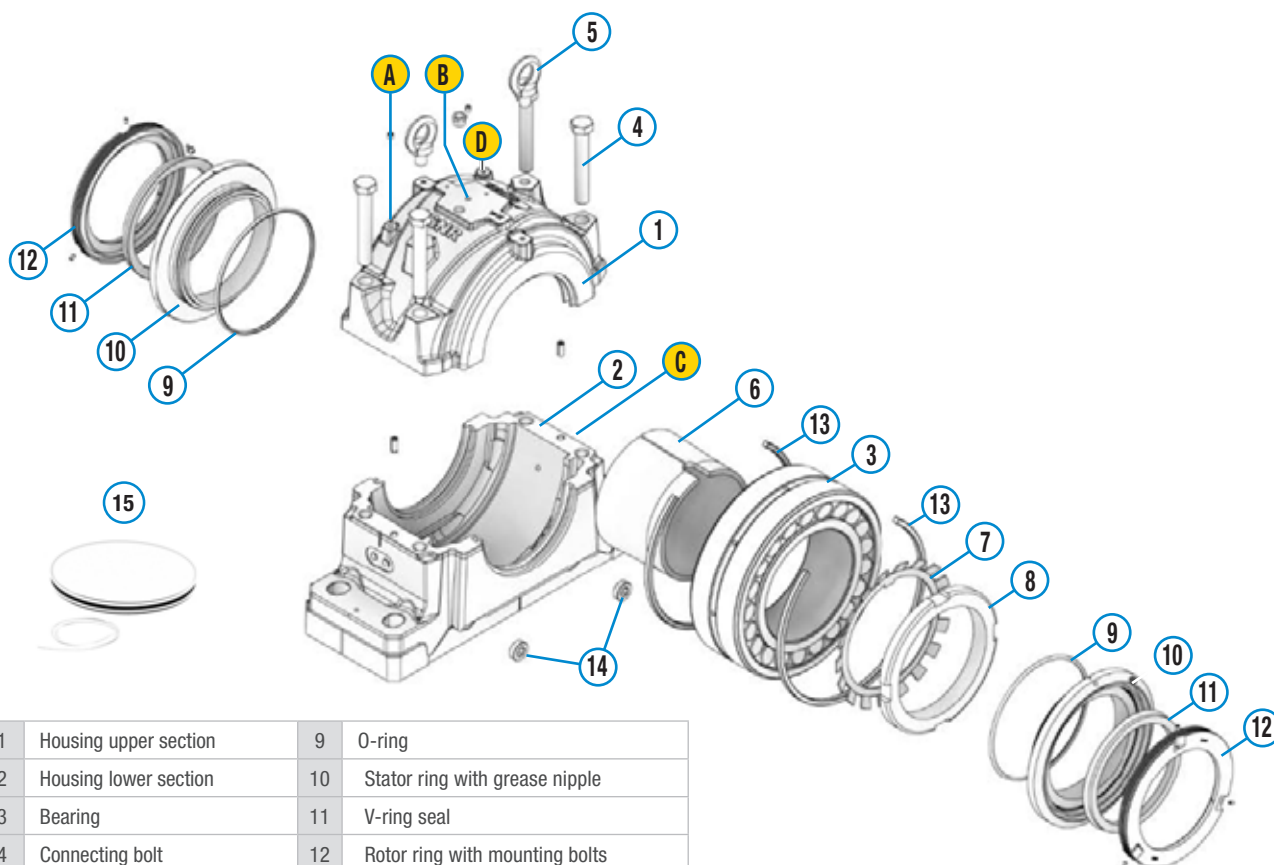


- 6** Centre the labyrinth rings **(9)** in the seal grooves of the housings. Between seal and shaft, insert the silicone tube into the groove of each seal ring. A screwdriver works well for this (do not use a sharp tool). Trim protruding ends of the silicone tube.

Important note

In order to ensure safe and reliable operation, check the screwed connections 24 hours after starting up the unit and tighten them again if necessary.

7. INSTALLATION OF TACONITE SEAL TA



1	Housing upper section	9	O-ring
2	Housing lower section	10	Stator ring with grease nipple
3	Bearing	11	V-ring seal
4	Connecting bolt	12	Rotor ring with mounting bolts
5	Eye bolt	13	Locating ring
6	Adapter sleeve	14	Threaded plug
7	Locking plate	15	Cover with silicone tube
8	Slotted nut		

INSTALLATION INSTRUCTIONS

• **To prevent injury and material damage during installation, please also observe the following chapters of this catalogue.**

- Installation preparations and safety instructions (page 20)
- Installation instructions for SNCD plummer block housings (page 20)

• **Clamping area recommendations**

- Flatness tolerance min. IT7; measured across the foot diagonal
- Surface roughness: Ra ≤ 12.5 µm

• **Installation of bearing with slotted nut (adapter sleeve; shaft end bearing arrangement)**

Due to package space considerations, fit the slotted nut on the side with the grease drain holes.

• **Housing with TE cover**

If a housing is positioned at the end of a shaft, it can be closed off with a TE cover. The cover is installed in the seal groove of the housing on the side of the grease drain hole.

• **Grease nipple position A – D**

The lubricant supply points (A) and (D) in the top of the housing are designed for lubricating laterally through the bearing or for bearings without a circumferential groove and lubricating holes in the outer ring. For bearings that permit re-lubrication via the outer ring, it is better to use lubricant supply points (B) or (C).

• **Instructions for floating bearing function:**

The temperature-dependant elongation of the shaft must not exceed the axial displacement of the seal.

Allowable axial displacement:

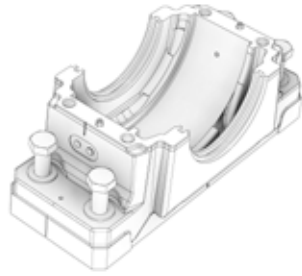
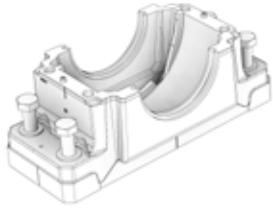
Allowable axial displacement:

- ± 2 mm (≤ 200 mm shaft diameter)
- ± 4 mm (> 200 mm shaft diameter)

• **Shaft misalignment**

Maximum permissible misalignment of the shaft: 0.3°

INSTALLATION STEPS



- 1** Position the lower housing sections (2) securely. During installation, note that the bearing is not centred in the housing. The markings on the side of the lower section of the housing indicate the centre of the bearing seat.

Tighten the foot bolts lightly by hand.

2

Slide inner seal elements onto shaft in the following sequence.

(Observe installation arrangement):

1) Rotor-Ring (12)

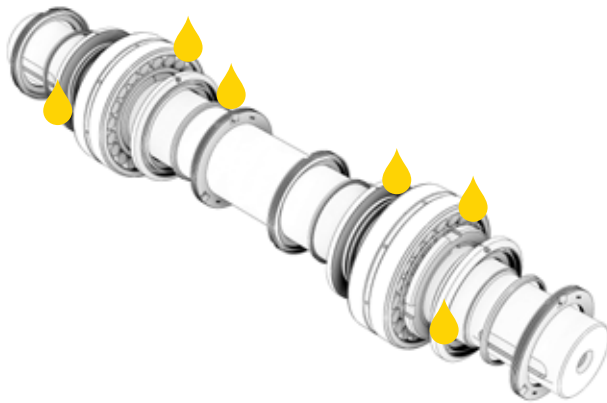
2) V-Ring (11)

> Thoroughly grease the V-ring sealing lip and the counterface on the stator.

3) Stator ring with mounted O-ring (10)

4) Bearings (3) with adapter sleeve (6, 7, 8)

> Bearings must be completely filled with grease.



Then slide outer seal elements onto shaft in the following sequence.

(Observe installation arrangement):

5) Stator ring with mounted O-ring (10)

6) V-Ring (11)

7) Rotor-Ring (12)

> Thoroughly grease the V-ring sealing lip and the counterface.

3

INSTALLATION OF THE SHAFT IN THE HOUSING

(with bearing and seal components)

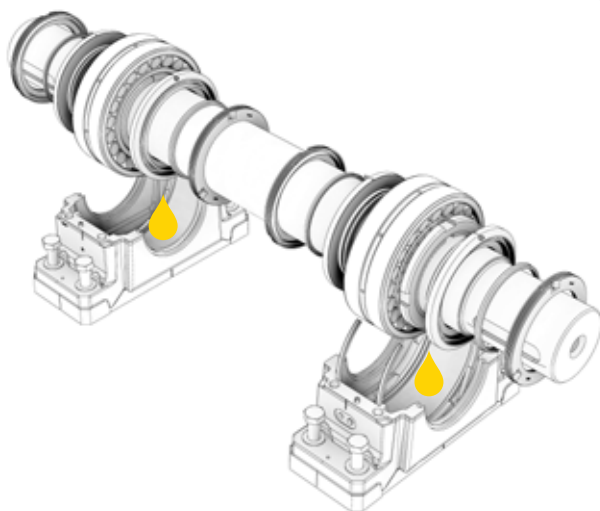
Insertion of the assembly in a floating bearing configuration

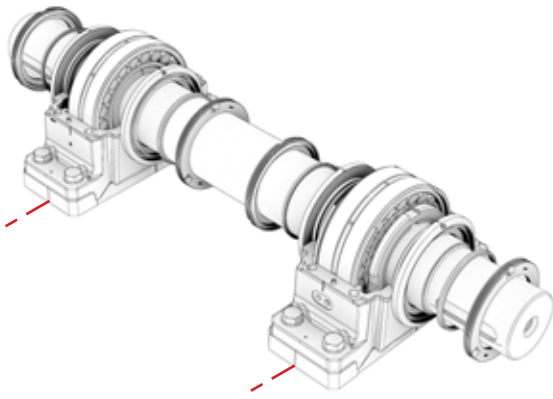
Insert the assembly into the lower section. Carefully guide the stator rings (10), with grease nipple pointing upward, into the seal grooves of the lower housing sections (2). Ensure that the O-rings are not crimped or damaged. Position the bearing in the centre of the bearing seat. Distribute the required quantity of grease (table on page 17) in the upper and lower housing sections while applying lubricant primarily to the space opposite the grease drain hole.

Insertion of the assembly in a fixed bearing configuration

Install locating rings (13) in the lower housing section (2) and slide them up against the outer edges of the bearing seat (for number of rings, refer to dimension table from page 36). Arrange the rings to position the bearing in the centre of the bearing seat. Rotate the locating rings to move their openings to the top.

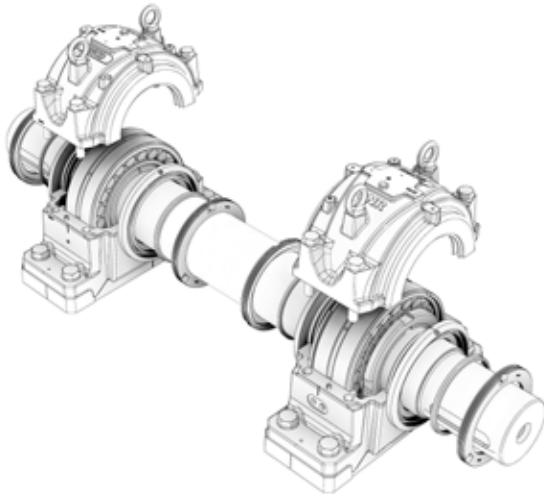
Insert the assembly into the housing lower section while carefully guiding the stator rings (10), with grease nipple pointing upward, into the seal grooves of the lower housing sections. Ensure that the O-rings are not crimped or damaged. Distribute the required quantity of grease (table on page 17) in the upper and lower housing sections while applying lubricant primarily to the space opposite the grease drain hole.



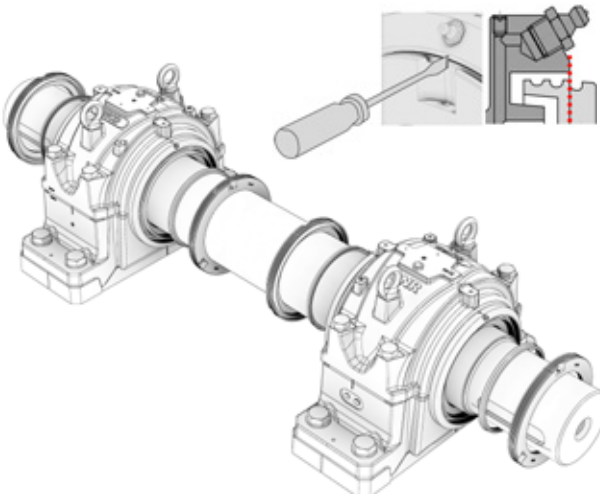


- 4** Use the alignment marks and the machined contact surfaces to correctly position the housing lower sections (2). Securely tighten the foot bolts evenly in a cross pattern (→table p. 25).

If the TE cover (15) is used, install it in the seal groove together with the silicone tube provided.



- 5** Place the housing upper sections (1) on the lower sections (2). Verify that the housing section pairs are marked identically. During installation, ensure that the O-rings are correctly installed in the seal grooves of the upper sections. They must not be crimped or damaged. Evenly tighten the connecting bolts in a cross pattern (→ table p. 25).



- 6** Slide the rotor rings (12) together with the V-rings (11) against the counterface of the stator rings (10) and use the three grub screws to clamp them to the shaft.

> Tightening torque: 6 Nm

Uniform axial alignment of the seal rings is very important. The outer circumferential groove in the rotor must be aligned flush with the outer edge of the stator. A screwdriver can be helpful when positioning the rotor ring (→ see inset).

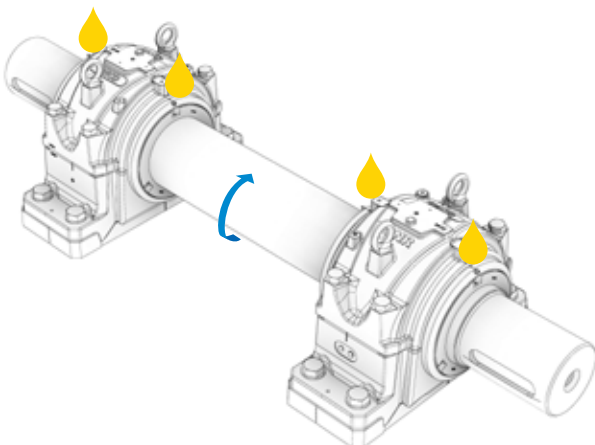
Instructions for the floating bearing configuration with shaft elongation.

The temperature-dependant elongation of the shaft must not exceed the axial displacement of the seal.

Allowable axial displacement:

± 2 mm (≤ 200 mm shaft diameter)

± 4 mm (> 200 mm shaft diameter)



- 7** Fill the Taconite seals with lubricant before commissioning the unit. To do this, turn the shaft slowly and apply the lubricant to the seals via the grease nipple. The seals are adequately filled when an even collar of grease forms in the seal gap between stator and rotor.

Important note

In order to ensure safe and reliable operation, check the screwed connections 24 hours after starting up the unit and tighten them again if necessary.

8. DESIGNATION SYSTEM

	SNCD	31	44	R
<p>Designation of the housing series</p> <p>Split plummer block housing made of spheroidal graphite (ductile) cast iron EN-GJS according to ISO 113-2010 and DIN736-2011 through DIN739-2011</p>				
<p>ISO standard bearing size</p> <p>ISO standard 30 and 31 sized spherical roller bearings (series) Also compatible with other ISO standard size bearings</p>				
<p>Bearing bore code</p> <p>34 - 30/500 Shaft diameter, metric: 115 mm - 500 mm Shaft diameter, inch: 5 13/16" - 18 1/2"</p>				
<p>Housing for bearing with cylindrical bore</p> <p>Installation of bearings on stepped shaft with shaft shoulder (no suffix for tapered bore bearings fixed with adapter sleeve)</p>				
<p>Locating rings</p> <p>All SNCD housings can be used in a fixed bearing arrangement by using locating rings. Locating rings must be ordered separately. The relevant size and the number of locating rings to be used are listed in the dimension tables from page 36. Dimensions: Outer diameter x ring width x ring thickness</p>				<u>FR280x17x10</u>
<p>Seals and covers</p> <p>Labyrinth seal TS Labyrinth ring made of cast iron or steel with radial bars. Seal set: 1x labyrinth ring, 1x silicone tube</p>				<u>TS-44</u>
<p>Taconite seal TA multi-component sealing system made of steel for extreme applications. Seal set: 1x rotor ring, 1x stator ring, 1x O-ring, 1x V-ring 1x conical head grease nipple DIN 71412 - A-M10x1, 3x grub screws DIN 913 - M6x10</p>				<u>TA-44</u>
<p>Cover TE Made of cast iron or steel to plug the shaft outlet hole. Seal set: 1x cover, 1x silicone tube</p>				<u>TE-44</u>
<p>Seals for shafts with inch dimensions: 7 15/16 inch</p>				<u>TS-44- 7-15/16</u>
<p>Special seals: Code 38 with 180 mm shaft diameter</p>				<u>TS-38-180</u>

NOTE

Please note that one seal set must be ordered for each housing side.

9. EXPLANATIONS – ORDER EXAMPLE

SNCD plummer block housing: scope of delivery

One flat head and one conical head grease nipple (M10x1 each) as well as one adapter (M10x1 to G1/4) are included with each housing.

They are not installed and are packaged separately inside the housing. The corresponding threaded holes and the grease drain holes in the housing lower section are closed with threaded plugs (DIN 906). The shaft outlet holes are covered with protective covers.

For lifting the bearing housings, two eye bolts (DIN 580) are screwed into the upper section

Material / Paint / Corrosion protection

SNCD housings are made of spheroidal graphite (ductile) cast iron EN-GJS according to DIN EN 1563.

All unmachined surfaces are coated with primer as standard. External surfaces are coated with black varnish.

The machined surfaces in the interior and on the foot have an anti-corrosion coating

Examples of orders for SNCD large plummer block housings

A

Large plummer block housing SNCD for through shaft, series 231 spherical roller bearing on adapter sleeve for shaft diameter 240 mm, labyrinth seal, floating bearing arrangement:

- Plummer block housing:	1x SNCD3152
- Rolling bearing:	1x 23152EMKD1 (W33)
- Adapter sleeve:	1x H3152H
- Seal:	2x TS-52
- Locating ring:	none

B

Large plummer block housing SNCD for shaft end bearing arrangement, series 230 spherical roller bearing with cylindrical bore for shaft diameter 420 mm, Taconite seal, fixed bearing arrangement:

- Plummer block housing:	1x SNCD3084R
- Rolling bearing:	1x 23084B
- Seal:	1x TA-96
- Cover:	1x TE-96
- Locating rings:	2x FR620X22X15

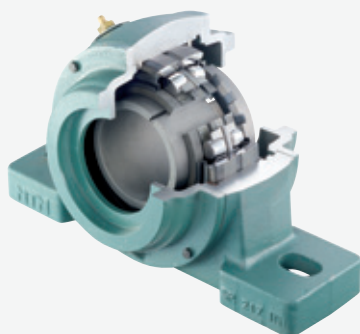
10. OTHER MODEL SERIES

Bearing housings for grease lubrication



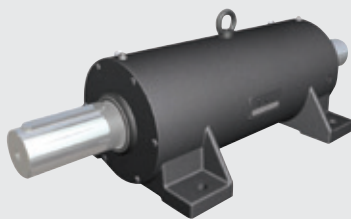
Split plummer block housing SNC / SNCD500

- 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



SPW/SFCW – Bearing housings for heavy loads

- Suitable for very harsh environments in the lumber 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

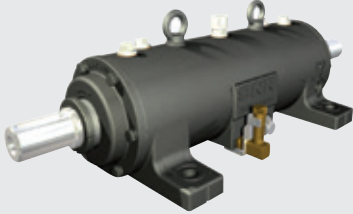
- For the installation of two or three rolling bearings
- Grease lubrication
- Suitable for high operating speeds (industrial fans)
- Extremely smooth operation due to precise alignment of the bearings in the housing
- Felt seal with additional V-ring seal
- Easy installation on the clamping area
- Shaft 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 FOR 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

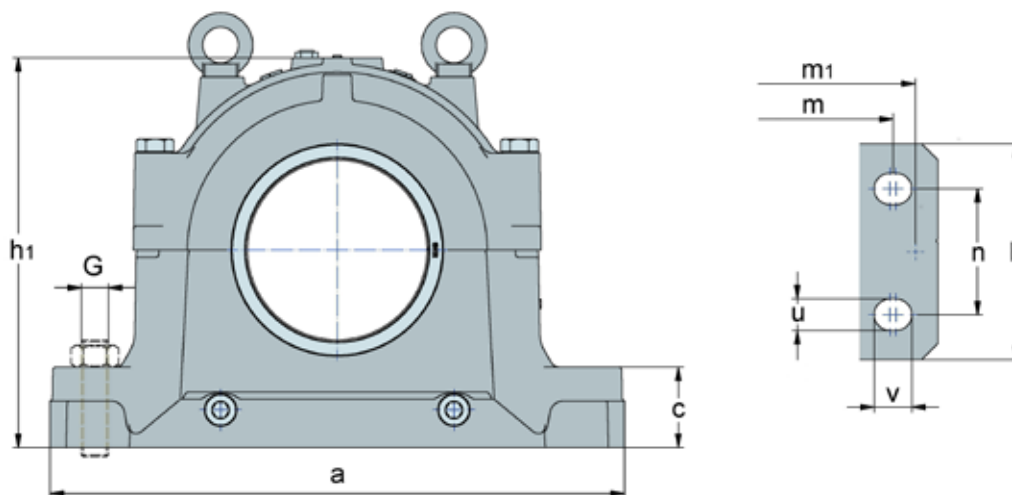
- Suitable for spherical roller bearings
- For applications with high operating speeds and heavy loads
- Housing material: EN-GJS for especially high strength and torsional rigidity
- Internal oil distribution via an oil pick-up ring
- Labyrinth sealing system
- Equipped with an oil-level indicator
- 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)

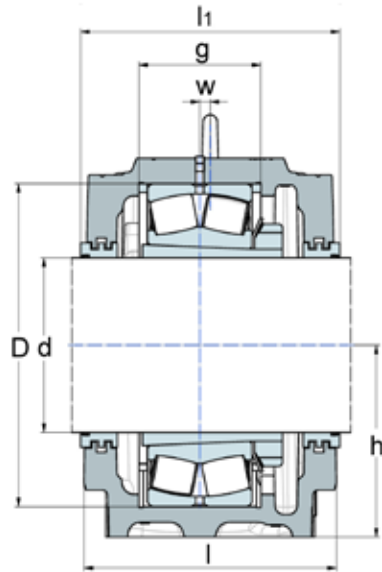
- Suitable for spherical roller bearings
- Low-friction labyrinth seal system
- SNOL bearing housings can replace grease-lubricated units from the SN series. This may be necessary in case of: - Increased operating speeds - Higher operating temperatures - Extended service life - Prolonged maintenance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

11. DIMENSION TABLES

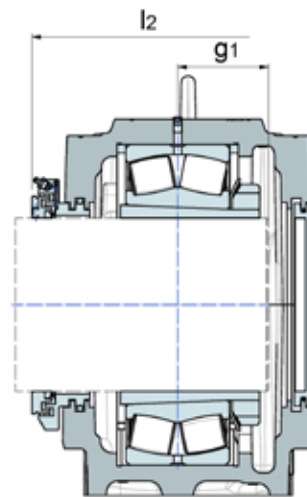


Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]														
			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g1 _{min/max} ¹⁾
115	SNCD3134	223	280	510	180	70	108	170	14	230	430	28	34	333	470	100	75/95
125	SNCD3136	223	300	530	190	75	116	180	15	240	450	28	34	353	490	110	80/102
135	SNCD3138	223	320	560	210	80	124	190	10	260	480	28	34	375	520	120	85/106
140	SNCD3038	222	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/91
140	SNCD3140	223	340	610	230	85	132	210	10	280	510	35	42	411	560	130	90/115
150	SNCD3134	231	280	510	180	70	108	170	14	230	430	28	34	333	470	100	78/93
150	SNCD3040	222	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
150	SNCD3048	223	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
160	SNCD3036	230	280	510	180	70	108	170	14	230	430	28	34	333	470	100	71/86
160	SNCD3136	231	300	530	190	75	116	180	15	240	450	28	34	353	490	110	83/99
160	SNCD3138	222	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
170	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
170	SNCD3138	231	320	560	210	80	124	190	10	260	480	28	34	375	520	120	87/104
170	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
170	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
180	SNCD3040	230	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
180	SNCD3140	231	340	610	230	85	132	210	10	280	510	35	42	411	560	130	93/114
180	SNCD3048	222	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
180	SNCD3056	223	420	770	280	100	166	260	16	320	650	42	50	516	720	160	106/133

¹⁾ g1 dimensions apply for bearings centred on the bearing seat



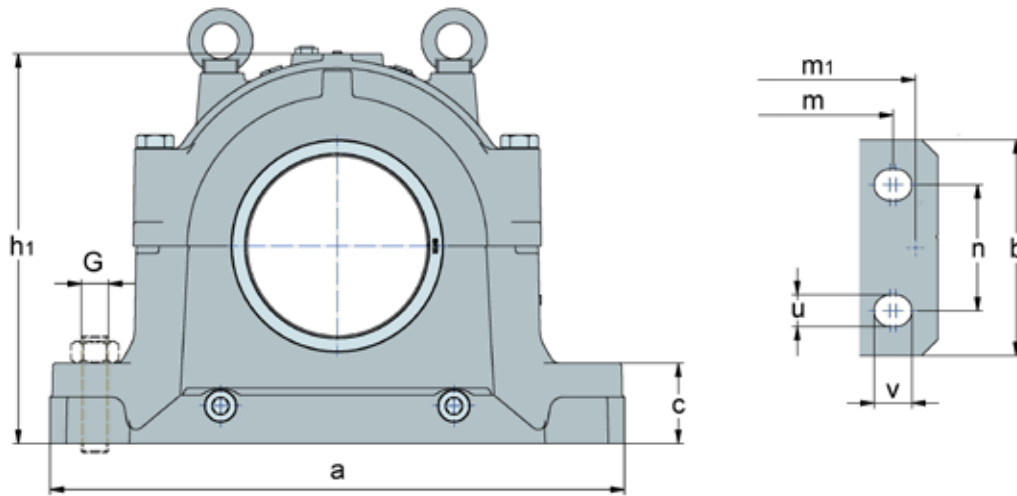
Labyrinth seal TS



Taconite seal TA
Cover TE

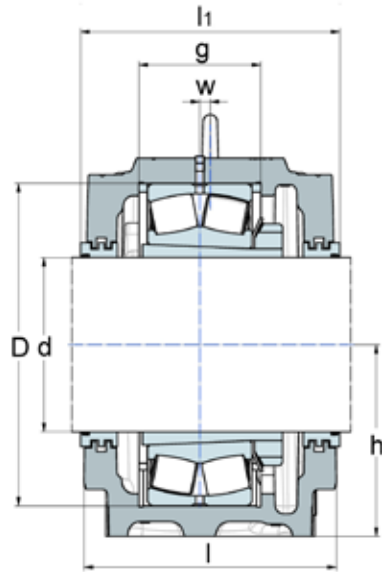
Total width across seal		Housing			Seals / spherical roller bearing / accessories							
I1	I2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearing	Adapter sleeve	Number of locating rings	Locating ring	
240	302	M24	73	M16	TS-34-115	TA-34-115	TE-34	22326K	H2326	2	FR280x7,5x10	
250	313	M24	83	M16	TS-36-125	TA-36-125	TE-36	22328K	H2328	2	FR300x7x10	
270	334	M24	100	M20	TS-38-135	TA-38-135	TE-38	22330K	H2330	2	FR320x8x10	
250	318	M24	85	M16	TS-38-140	TA-38-140	TE-38	22232K	H3132	2	FR290x17,5x10	
290	351	M30	129	M20	TS-40-140	TA-40-140	TE-40	22332K	H2332	2	FR340x9x10	
240	302	M24	73	M16	TS-34	TA-34	TE-34	23134K	H3134	2	FR280x10x10	
270	331	M24	103	M20	TS-40-150	TA-40-150	TE-40	22234K	H3134	2	FR310x18x10	
300	387	M30	141	M20	TS-48-150	TA-48-150	TE-48	22334K	H2334	2	FR360x10x10	
240	304	M24	71	M16	TS-36	TA-36	TE-36	23036K	H3036	2	FR280x17x10	
250	313	M24	83	M16	TS-36	TA-36	TE-36	23136K	H3136	2	FR300x10x10	
270	334	M24	100	M20	TS-38-160	TA-38-160	TE-38	22236K	H3136	2	FR320x19x10	
250	318	M24	85	M16	TS-38	TA-38	TE-38	23038K	H3038	4	FR290x10x6,5	
270	334	M24	100	M20	TS-38	TA-38	TE-38	23138K	H3138	2	FR320x10x10	
290	351	M30	129	M20	TS-40-170	TA-40-170	TE-40	22238K	H3138	4	FR340x10x10	
315	404	M30	183	M24	TS-48-170	TA-48-170	TE-48	22338K	H2338	2	FR400x8x15	
270	331	M24	103	M20	TS-40	TA-40	TE-40	23040K	H3040	4	FR310x10x10	
290	351	M30	129	M20	TS-40	TA-40	TE-40	23140K	H3140	2	FR340x10x10	
300	387	M30	141	M20	TS-48-180	TA-48-180	TE-48	22240K	H3140	2	FR360x21x10	
330	413	M36	232	M24	TS-56-180	TA-56-180	TE-56	22340K	H2340	2	FR420x14x15	

DIMENSION TABLES

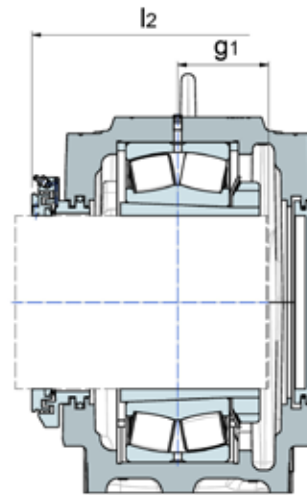


Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]														g ₁ ^{min/max} ¹⁾
			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	
200	SNCD3044	230	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
200	SNCD3144	231	370	640	240	90	140	220	12	290	540	35	42	434	590	140	100/120
200	SNCD3148	222	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118
200	SNCD3156	223	460	790	280	105	166	280	16	320	670	42	50	551	740	160	113/139
220	SNCD3048	230	360	640	240	90	140	220	12	290	540	35	42	434	590	140	85/106
220	SNCD3148	231	400	700	260	95	148	240	12	310	600	35	42	474	650	150	106/128
220	SNCD3152	222	440	770	280	100	164	260	13	320	650	42	50	516	720	160	102/125
220	SNCD3160	223	500	830	310	110	180	300	22	350	710	42	50	591	770	190	120/158
240	SNCD3052	230	400	700	260	95	148	240	12	310	600	35	42	474	650	150	91/116
240	SNCD3152	231	440	770	280	100	164	260	13	320	650	42	50	516	720	160	116/137
240	SNCD3064	222	480	830	310	110	181	300	22	350	710	42	50	591	770	190	109/145
240	SNCD3164	223	540	880	330	115	196	320	23	370	750	42	50	631	820	200	126/166
260	SNCD3056	230	420	770	280	100	166	260	16	320	650	42	50	516	720	160	96/117
260	SNCD3156	231	460	790	280	105	166	280	16	320	670	42	50	551	740	160	119/140
260	SNCD3160	222	500	830	310	110	180	300	22	350	710	42	50	591	770	190	111/146
260	SNCD3168	223	580	950	360	120	210	340	24	400	810	42	50	675	880	220	134/180
280	SNCD3060	230	460	790	280	105	168	280	16	320	670	42	50	551	740	160	106/125
280	SNCD3160	231	500	830	310	110	180	300	22	350	710	42	50	591	770	190	125/161
280	SNCD3164	222	540	880	330	115	196	320	23	370	750	42	50	631	820	200	115/154

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



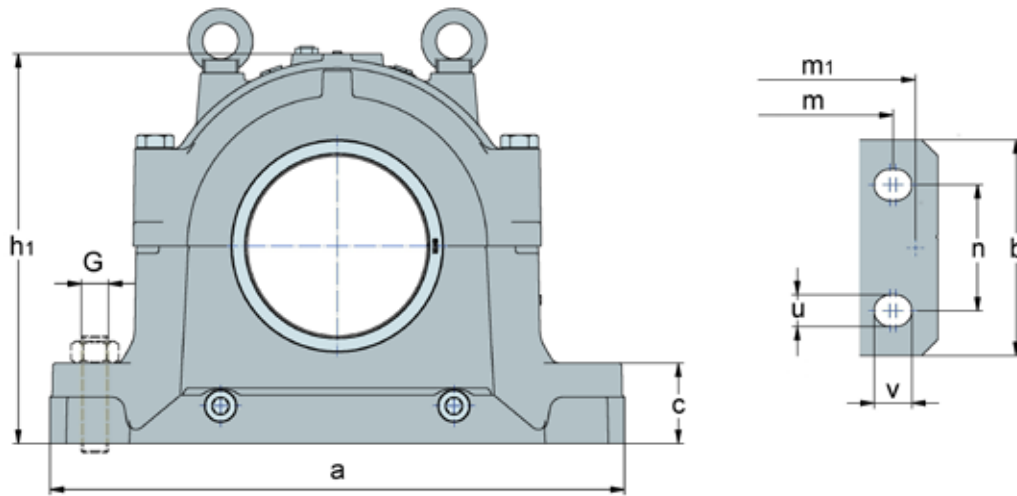
Labyrinth seal TS



Taconite seal TA
Cover TE

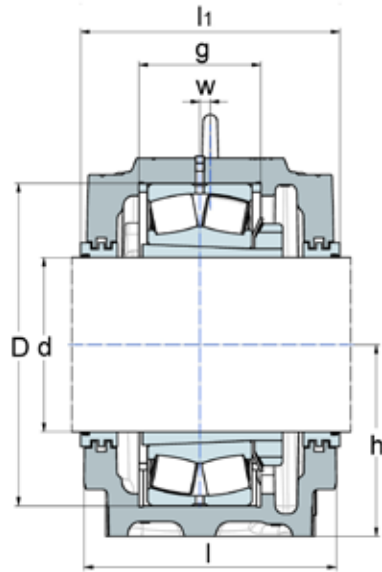
	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearing	Adapter sleeve	Number of locating rings	Locating ring
	290	353	M30	126	M20	TS-44	TA-44	TE-44	23044K	H3044H	4	FR340x10x10
	300	361	M30	139	M20	TS-44	TA-44	TE-44	23144K	H3144H	2	FR370x10x10
	315	404	M30	183	M24	TS-48-200	TA-48-200	TE-48	22244K	H3144H	4	FR400x10x10
	330	412	M36	245	M24	TS-56-200	TA-56-200	TE-56	22344K	H2344H	2	FR460x10,5x12
	300	387	M30	141	M20	TS-48	TA-48	TE-48	23048K	H3048H	4	FR360x12x10
	315	404	M30	183	M24	TS-48	TA-48	TE-48	23148K	H3148H	2	FR400x10x10
	330	414	M36	221	M24	TS-52-220	TA-52-220	TE-52	22248K	H3148H	2	FR440x22x10
	360	442	M36	300	M30	TS-60-220	TA-60-220	TE-60	22348K	H2348H	2	FR500x12,5x15
	315	397	M30	178	M24	TS-52	TA-52	TE-52	23052K	H3052H	2	FR400x22x10
	330	414	M36	221	M24	TS-52	TA-52	TE-52	23152K	H3152H	2	FR440x10x10
	360	443	M36	290	M30	TS-64-240	TA-64-240	TE-64	22252K	H3152H	2	FR480x25,5x12
	380	462	M36	348	M30	TS-64-240	TA-64-240	TE-64	22352K	H2352H	2	FR540x15,5x15
	330	413	M36	232	M24	TS-56	TA-56	TE-56	23056K	H3056H	6	FR420x10x10
	330	412	M36	245	M24	TS-56	TA-56	TE-56	23156K	H3156H	2	FR460x10x10
	360	442	M36	300	M30	TS-60-260	TA-60-260	TE-60	22256K	H3156H	2	FR500x25x15
	410	491	M36	429	M30	TS-68-260	TA-68-260	TE-68	22356K	H2356H	2	FR580x17,5x15
	330	412	M36	240	M24	TS-60	TA-60	TE-60	23060K	H3060H	2	FR460x25x10
	360	442	M36	300	M30	TS-60	TA-60	TE-60	23160K	H3160H	2	FR500x10x10
	380	462	M36	348	M30	TS-64-280	TA-64-280	TE-64	22260K	H3160H	2	FR540x28x12

DIMENSION TABLES

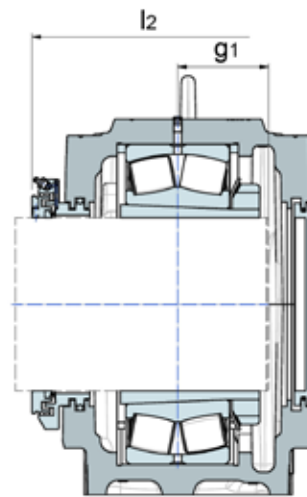


Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]														
			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g1 _{min/max} ¹⁾
300	SNCD3064	230	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
300	SNCD3164	231	540	880	330	115	196	320	23	370	750	42	50	631	820	200	135/172
320	SNCD3068	230	520	880	330	115	197	320	23	370	750	42	50	631	820	200	117/150
320	SNCD3168	231	580	950	360	120	210	340	24	400	810	42	50	675	880	220	155/188
340	SNCD3072	230	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
340	SNCD3172	231	600	1000	360	120	212	350	30	400	840	42	50	695	920	220	159/194
360	SNCD3076	230	560	950	360	120	180	340	24	400	810	42	50	675	880	220	121/175
360	SNCD3176	231	620	1040	360	120	214	360	30	400	870	42	50	715	960	220	162/194
380	SNCD3080	230	600	1000	360	120	192	350	30	400	840	42	50	695	920	220	131/182
380	SNCD3180	231	650	1120	390	125	220	380	30	430	950	48	60	775	1020	240	167/209
400	SNCD3084	230	620	1040	360	120	194	360	30	400	870	42	50	715	960	220	132/182
400	SNCD3184	231	700	1170	420	130	244	410	35	460	1000	48	60	810	1070	260	187/229
410	SNCD3088	230	650	1120	390	125	200	380	30	430	950	48	60	775	1020	240	144/197
410	SNCD3188	231	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	188/229
430	SNCD3092	230	680	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	147/208
450	SNCD3096	230	700	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	148/209
470	SNCD30/500	230	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	157/209

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



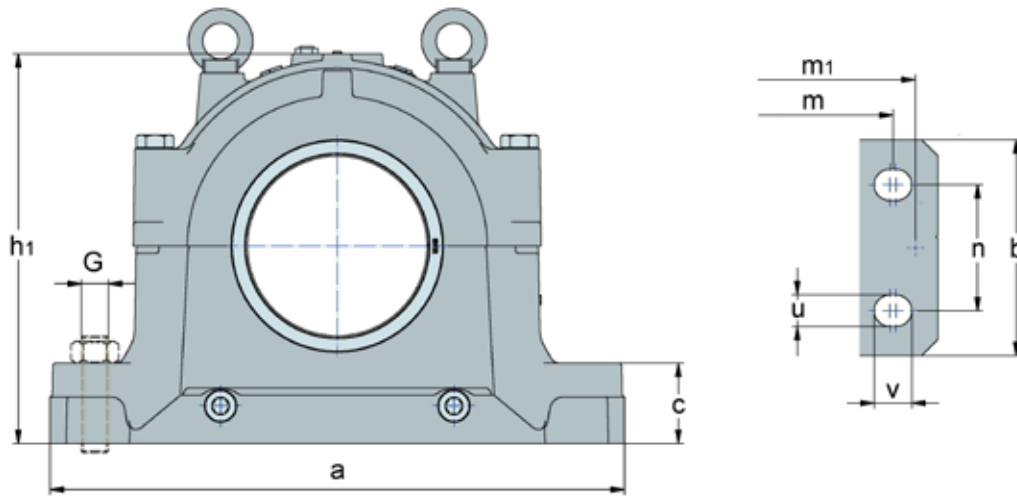
Labyrinth seal TS



Taconite seal TA
Cover TE

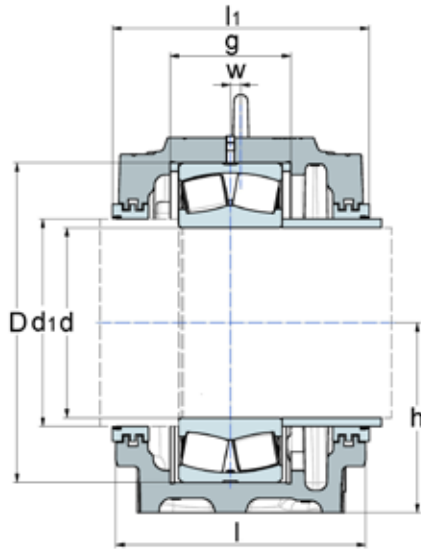
Total width across seal		Housing				Seals / spherical roller bearing / accessories						
I1	I2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearing	Adapter sleeve	Number of locating rings	Locating ring	
360	443	M36	290	M30	TS-64	TA-64	TE-64	23064K	H3064H	6	FR480x10x10	
380	462	M36	348	M30	TS-64	TA-64	TE-64	23164K	H3164H	2	FR540x10x10	
380	461	M36	365	M30	TS-68	TA-68	TE-68	23068K	H3068H	4	FR520x16x10	
410	491	M36	429	M30	TS-68	TA-68	TE-68	23168K	H3168H	2	FR580x10x10	
380	461	M36	336	M30	TS-72	TA-72	TE-72	23072K	H3072H	4	FR540x16x10	
410	491	M36	455	M36	TS-72	TA-72	TE-72	23172K	H3172H	2	FR600x10x10	
410	492	M36	448	M30	TS-76	TA-76	TE-76	23076K	H3076H	2	FR560x22,5x10	
410	491	M36	480	M36	TS-76	TA-76	TE-76	23176K	H3176H	2	FR620x10x15	
410	492	M36	446	M36	TS-80	TA-80	TE-80	23080K	H3080H	2	FR600x22x10	
440	521	M42	602	M42	TS-80	TA-80	TE-80	23180K	H3180H	2	FR650x10x15	
410	492	M36	471	M36	TS-84	TA-84	TE-84	23084K	H3084H	2	FR620x22x15	
470	551	M42	722	M42	TS-84	TA-84	TE-84	23184K	H3184H	2	FR700x10x15	
440	522	M42	593	M42	TS-88	TA-88	TE-88	23088K	H3088H	2	FR650x21,5x15	
470	551	M42	761	M42	TS-88	TA-88	TE-88	23188K	H3188H	2	FR720x10x15	
470	561	M42	749	M42	TS-92	TA-92	TE-92	23092K	H3092H	2	FR680x30,5x15	
470	561	M42	707	M42	TS-96	TA-96	TE-96	23096K	H3096H	2	FR700x29,5x15	
470	561	M42	743	M42	TS-500	TA-500	TE-500	230/500K	H30/500H	2	FR720x29,5x15	

DIMENSION TABLES

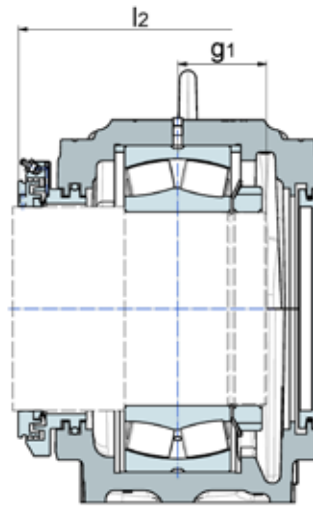


Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]															
			d1	D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g ¹ _{min/max} ¹⁾
130	SNCD3134	223	150	280	510	180	70	108	170	14	230	430	28	34	333	470	100	75/95
140	SNCD3136	223	160	300	530	190	75	116	180	15	240	450	28	34	353	490	110	80/102
150	SNCD3138	223	170	320	560	210	80	124	190	10	260	480	28	34	375	520	120	85/106
160	SNCD3038	222	180	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/91
160	SNCD3140	223	180	340	610	230	85	132	210	10	280	510	35	42	411	560	130	90/115
170	SNCD3134R	231	180	280	510	180	70	108	170	14	230	430	28	34	333	470	100	78/93
170	SNCD3040	222	190	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
170	SNCD3048	223	190	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
180	SNCD3036R	230	200	280	510	180	70	108	170	14	230	430	28	34	333	470	100	72/86
180	SNCD3136R	231	200	300	530	190	75	116	180	15	240	450	28	34	353	490	110	83/99
180	SNCD3138R	222	200	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
190	SNCD3038R	230	200	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
190	SNCD3138R	231	200	320	560	210	80	124	190	10	260	480	28	34	375	520	120	88/104
190	SNCD3140R	222	210	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
190	SNCD3148	223	210	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
200	SNCD3040R	230	220	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
200	SNCD3048	222	220	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
200	SNCD3056	223	220	420	770	280	100	166	260	13	320	650	42	50	516	720	160	106/133
200	SNCD3140R	231	220	340	610	230	85	132	210	10	280	510	35	42	411	560	130	93/114

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



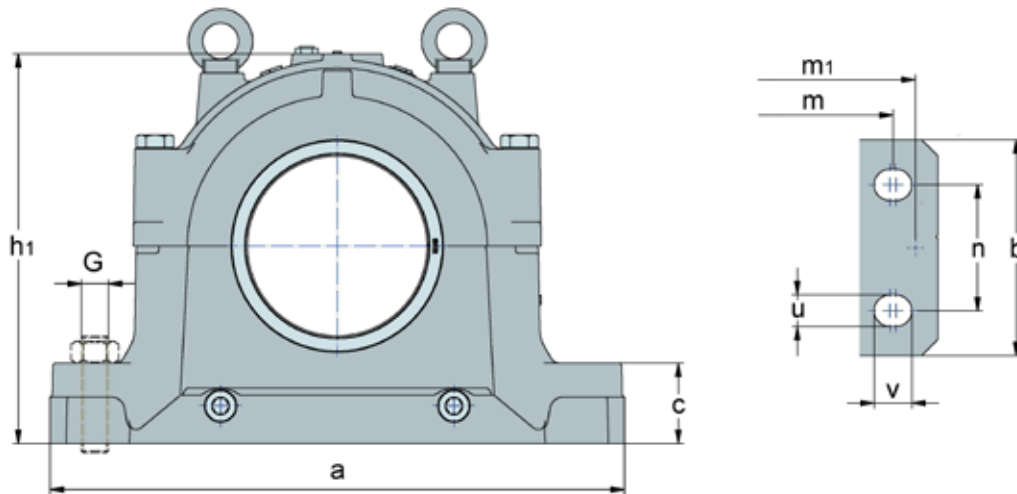
Labyrinth seal TS



Taconite seal TA
Cover TE

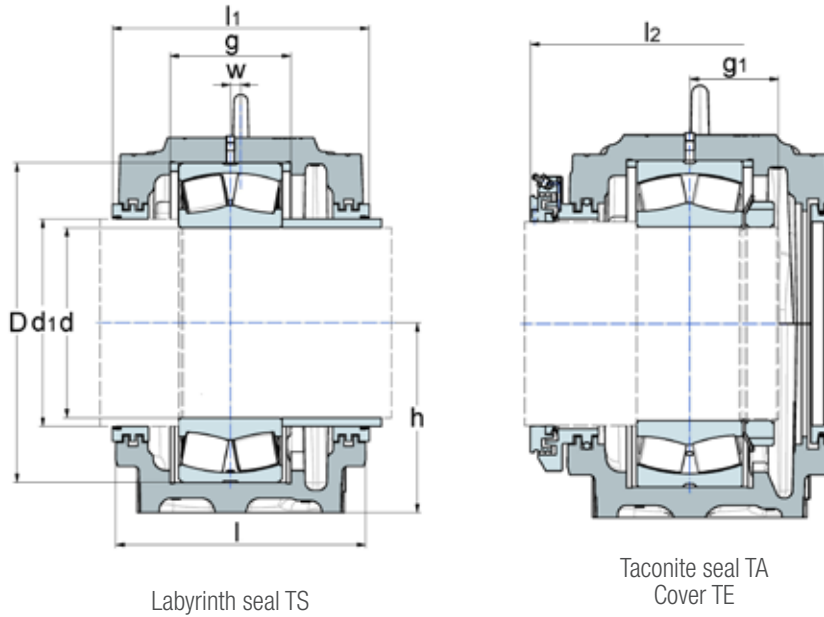
	Total width across seal		Housing			Seals / spherical roller bearing / accessories					
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Number of locating rings	Locating ring
	240	301	M24	68	M16	TS-34	TA-34	TE-34	22326	2	FR280x7,5x10
	250	313	M24	76	M16	TS-36	TA-36	TE-36	22328	2	FR300x7x10
	270	334	M24	95	M20	TS-38	TA-38	TE-38	22330	2	FR320x8x10
	250	318	M24	80	M16	TS-38-180	TA-38-180	TE-38	22232	2	FR290x17,5x10
	290	351	M30	122	M20	TS-40	TA-40	TE-40	22332	2	FR340x9x10
	240	301	M24	68	M16	TS-40	TA-40	TE-40	23134	2	FR280x10x10
	270	331	M24	96	M20	TS-40-190	TA-40-190	TE-40	22234	2	FR310x18x10
	300	387	M30	132	M20	TS-48-190	TA-48-190	TE-48	22334	2	FR360x10x10
	240	304	M24	64	M16	TS-44	TA-44	TE-44	23036	2	FR280x17x10
	250	313	M24	76	M16	TS-44	TA-44	TE-44	23136	2	FR300x10x10
	270	334	M24	95	M20	TS-44	TA-44	TE-44	22236	2	FR320x19x10
	250	318	M24	80	M16	TS-44	TA-44	TE-44	23038	4	FR290x10x6,5
	270	334	M24	95	M20	TS-44	TA-44	TE-44	23138	2	FR320x10x10
	290	351	M30	122	M20	TS-48-210	TA-48-210	TE-48	22238	4	FR340x10x10
	315	404	M30	174	M24	TS-48-210	TA-48-210	TE-48	22338	2	FR400x8x15
	270	331	M24	96	M20	TS-48	TA-48	TE-48	23040	4	FR310x10x10
	300	387	M30	132	M20	TS-48	TA-48	TE-48	22240	2	FR360x21x10
	330	413	M36	223	M24	TS-56-220	TA-56-220	TE-56	22340	2	FR420x14x15
	290	351	M30	122	M20	TS-48	TA-48	TE-48	23140	2	FR340x10x10

DIMENSION TABLES



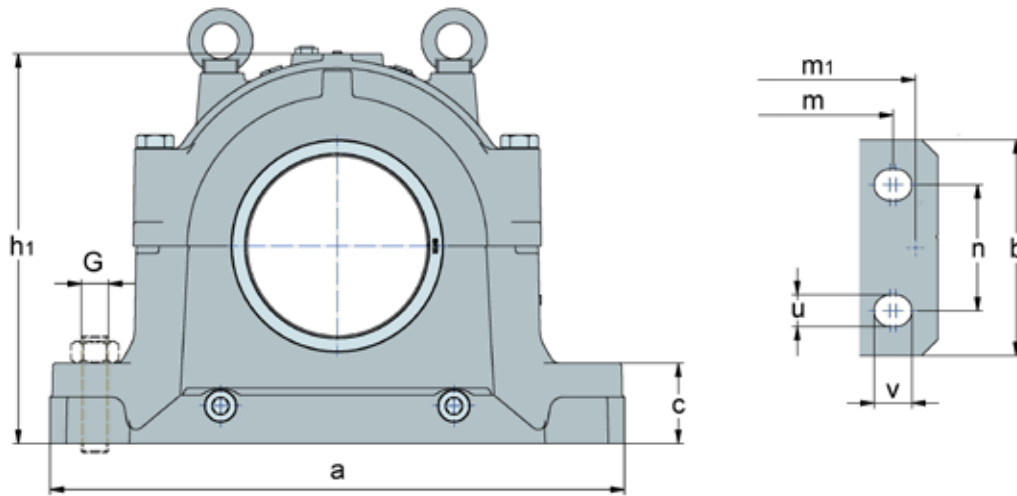
Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]															
			d1	D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g ¹ _{min/max} ¹⁾
220	SNCD3044R	230	240	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
220	SNCD3144R	231	240	370	640	240	90	140	220	12	290	540	35	42	434	590	140	100/120
220	SNCD3148R	222	240	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118
220	SNCD3156	223	240	460	790	280	105	166	280	16	320	670	42	50	551	740	160	113/139
240	SNCD3048R	230	260	360	640	240	90	140	220	12	290	540	35	42	434	590	140	85/106
240	SNCD3148R	231	260	400	700	260	95	148	240	12	310	600	35	42	474	650	150	106/128
240	SNCD3152R	222	260	440	770	280	100	164	260	13	320	650	42	50	516	720	160	102/125
240	SNCD3160	223	260	500	830	310	110	180	300	22	350	710	42	50	591	770	190	120/158
260	SNCD3052R	230	280	400	700	260	95	148	240	12	310	600	35	42	474	650	150	91/116
260	SNCD3064	222	280	480	830	310	110	181	300	22	350	710	42	50	591	770	190	109/145
260	SNCD3152R	231	280	440	770	280	100	164	260	13	320	650	42	50	516	720	160	116/137
260	SNCD3164	223	290	540	880	330	115	196	320	23	370	750	42	50	631	820	200	126/166
280	SNCD3056R	230	300	420	770	280	100	166	260	13	320	650	42	50	516	720	160	96/117
280	SNCD3156R	231	300	460	790	280	105	166	280	16	320	670	42	50	551	740	160	119/140
280	SNCD3160R	222	300	500	830	310	110	180	300	22	350	710	42	50	591	770	190	111/146
280	SNCD3168	223	310	580	950	360	120	210	340	24	400	810	42	50	675	880	220	134/180
300	SNCD3060R	230	320	460	790	280	105	168	280	16	320	670	42	50	551	740	160	106/125
300	SNCD3160R	231	320	500	830	310	110	180	300	22	350	710	42	50	591	770	190	125/161
300	SNCD3164R	222	320	540	880	330	115	196	320	23	370	750	42	50	631	820	200	115/154

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



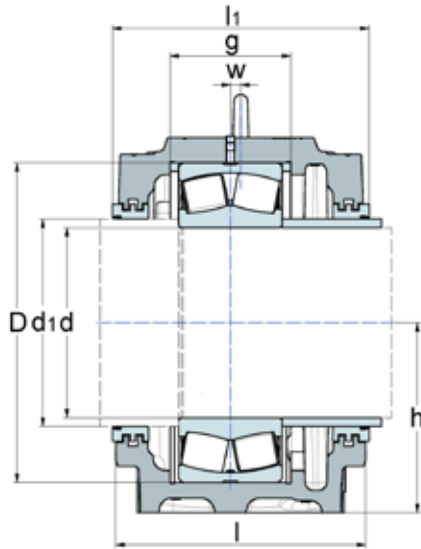
	Total width across seal		Housing			Seals / spherical roller bearing / accessories					
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Number of locating rings	Locating ring
	290	353	M30	117	M20	TS-52	TA-52	TE-52	23044	4	FR340x10x10
	300	361	M30	131	M20	TS-52	TA-52	TE-52	23144	2	FR370x10x10
	315	404	M30	174	M24	TS-56-240	TA-56-240	TE-56	22244	4	FR400x10x10
	330	412	M36	235	M24	TS-56-240	TA-56-240	TE-56	22344	2	FR460x10,5x12
	300	387	M30	132	M20	TS-56	TA-56	TE-56	23048	4	FR360x12x10
	315	404	M30	174	M24	TS-56	TA-56	TE-56	23148	2	FR400x10x10
	330	414	M36	212	M24	TS-60-260	TA-60-260	TE-60	22248	2	FR440x22x10
	360	442	M36	315	M30	TS-60-260	TA-60-260	TE-60	22348	2	FR500x12,5x15
	315	397	M30	168	M24	TS-60	TA-60	TE-60	23052	2	FR400x22x10
	360	443	M36	304	M30	TS-64-280	TA-64-280	TE-64	22252	2	FR480x25,5x12
	330	414	M36	212	M24	TS-60	TA-60	TE-60	23152	2	FR440x10x10
	380	462	M36	336	M30	TS-64-290	TA-64-290	TE-64	22352	2	FR540x15,5x15
	330	413	M36	223	M24	TS-64	TA-64	TE-64	23056	6	FR420x10x10
	330	412	M36	235	M24	TS-64	TA-64	TE-64	23156	2	FR460x10x10
	360	442	M36	315	M30	TS-68-300	TA-68-300	TE-68	22256	2	FR500x25x15
	410	491	M36	418	M30	TS-68-310	TA-68-310	TE-68	22356	2	FR580x17,5x15
	330	412	M36	230	M24	TS-68	TA-68	TE-68	23060	2	FR460x25x10
	360	442	M36	315	M30	TS-68	TA-68	TE-68	23160	2	FR500x10x10
	380	462	M36	336	M30	TS-72-320	TA-72-320	TE-72	22260	2	FR540x28x12

DIMENSION TABLES

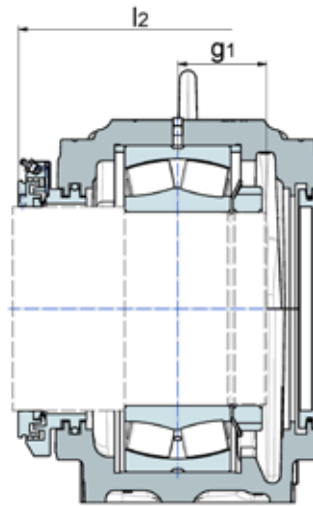


Shaft diameter d [mm]	Housing designation	Bearing series	Housing dimensions [mm]															
			d1	D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g ¹ _{min/max} ¹⁾
320	SNCD3064R	230	340	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
320	SNCD3164R	231	340	540	880	330	115	196	320	23	370	750	42	50	631	820	200	135/172
340	SNCD3068R	230	360	520	880	330	115	197	320	23	370	750	42	50	631	820	200	117/150
340	SNCD3168R	231	360	580	950	360	120	210	340	24	400	810	42	50	675	880	220	155/188
360	SNCD3072R	230	380	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
360	SNCD3172R	231	380	600	1000	360	120	212	350	30	400	840	42	50	695	920	220	159/194
380	SNCD3076R	230	400	560	950	360	120	180	340	24	400	810	42	50	675	880	220	121/175
380	SNCD3176R	231	400	620	1040	360	120	214	360	30	400	870	42	50	715	960	220	162/194
400	SNCD3080R	230	430	600	1000	360	120	192	350	30	400	840	42	50	695	920	220	131/182
400	SNCD3180R	231	430	650	1120	390	125	220	380	30	430	950	48	60	775	1020	240	167/209
420	SNCD3084R	230	450	620	1040	360	120	194	360	30	400	870	42	50	715	960	220	132/182
420	SNCD3184R	231	450	700	1170	420	130	244	410	35	460	1000	48	60	810	1070	260	187/229
440	SNCD3088R	230	470	650	1120	390	125	200	380	30	430	950	48	60	775	1020	240	144/197
440	SNCD3188R	231	470	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	188/229
460	SNCD3092R	230	500	680	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	147/208
480	SNCD3096R	230	510	700	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	148/209
500	SNCD30/500R	230	530	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	157/209

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



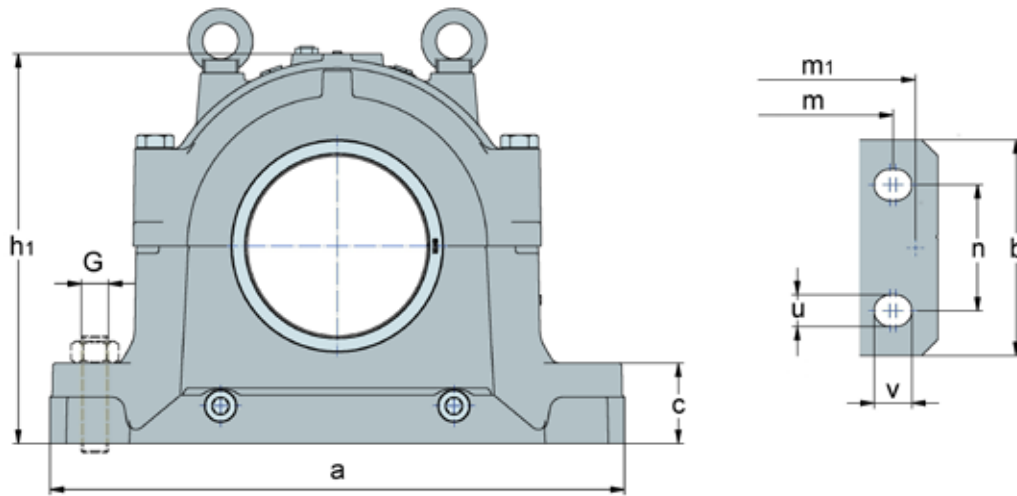
Labyrinth seal TS



Taconite seal TA
Cover TE

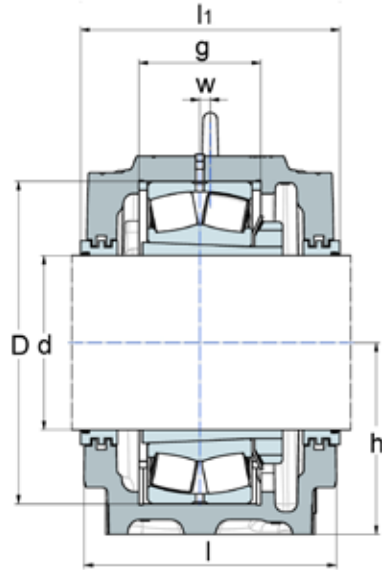
	Total width across seal		Housing			Seals / spherical roller bearing / accessories					
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Number of locating rings	Locating ring
	360	443	M36	304	M30	TS-72	TA-72	TE-72	23064	6	FR480x10x10
	380	462	M36	336	M30	TS-72	TA-72	TE-72	23164	2	FR540x10x10
	380	461	M36	354	M30	TS-76	TA-76	TE-76	23068	4	FR520x16x10
	410	491	M36	418	M30	TS-76	TA-76	TE-76	23168	2	FR580x10x10
	380	461	M36	324	M30	TS-80	TA-80	TE-80	23072	4	FR540x16x10
	410	491	M36	443	M36	TS-80	TA-80	TE-80	23172	2	FR600x10x10
	410	492	M36	435	M30	TS-84	TA-84	TE-84	23076	2	FR560x22,5x10
	410	491	M36	467	M36	TS-84	TA-84	TE-84	23176	2	FR620x10x15
	410	492	M36	426	M36	TS-92	TA-92	TE-92	23080	2	FR600x22x10
	440	521	M42	582	M42	TS-92	TA-92	TE-92	23180	2	FR650x10x15
	410	492	M36	449	M36	TS-96	TA-96	TE-96	23084	2	FR620x22x15
	470	551	M42	700	M42	TS-96	TA-96	TE-96	23184	2	FR700x10x15
	440	522	M42	571	M42	TS-500	TA-500	TE-500	23088	2	FR650x21,5x15
	470	551	M42	739	M42	TS-500	TA-500	TE-500	23188	2	FR720x29,5x15
	470	561	M42	721	M42	TS-530	TA-530	TE-530	23092	2	FR680x30,5x15
	470	561	M42	686	M42	TS-530/510	TA-530/510	TE-530	23096	2	FR700x29,5x15
	470	561	M42	717	M42	TS-560	TA-560	TE-560	230/500	2	FR720x29,5x15

DIMENSION TABLES

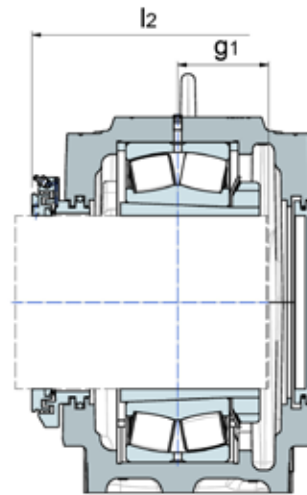


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
147.638	5 13/16	SNCD3040	222	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
147.638	5 13/16	SNCD3048	223	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
149.225	5 7/8	SNCD3040	222	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
149.225	5 7/8	SNCD3048	223	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
150.813	5 15/16	SNCD3134	231	280	510	180	70	108	170	14	230	430	28	34	333	470	100	78/93
150.813	5 15/16	SNCD3040	222	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
150.813	5 15/16	SNCD3048	223	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
152.400	6	SNCD3134	231	280	510	180	70	108	170	14	230	430	28	34	333	470	100	78/93
152.400	6	SNCD3040	222	310	560	210	80	122	190	10	260	480	28	34	375	520	120	77/96
152.400	6	SNCD3048	223	360	640	240	90	140	220	12	290	540	35	42	434	590	140	94/120
160.338	6 5/16	SNCD3036	230	280	510	180	70	108	170	14	230	430	28	34	333	470	100	71/86
160.338	6 5/16	SNCD3138	222	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
161.925	6 3/8	SNCD3036	230	280	510	180	70	108	170	14	230	430	28	34	333	470	100	71/86
161.925	6 3/8	SNCD3138	222	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
163.513	6 7/16	SNCD3036	230	280	510	180	70	108	170	14	230	430	28	34	333	470	100	71/86
163.513	6 7/16	SNCD3136	231	300	530	190	75	116	180	15	240	450	28	34	353	490	110	83/99
163.513	6 7/16	SNCD3138	222	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95

¹⁾ g1 Dimensions apply for bearings centred on the bearing seat



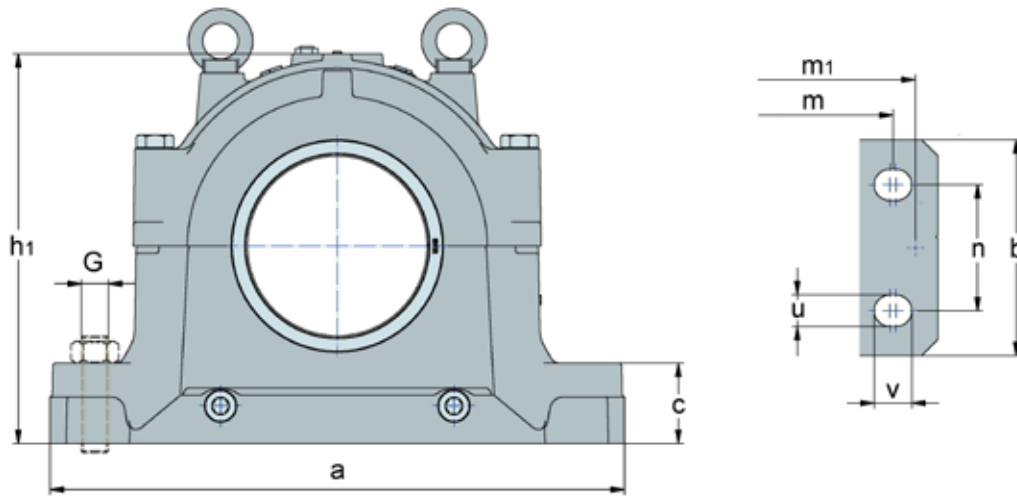
Labyrinth seal TS



Taconite seal TA
Cover TE

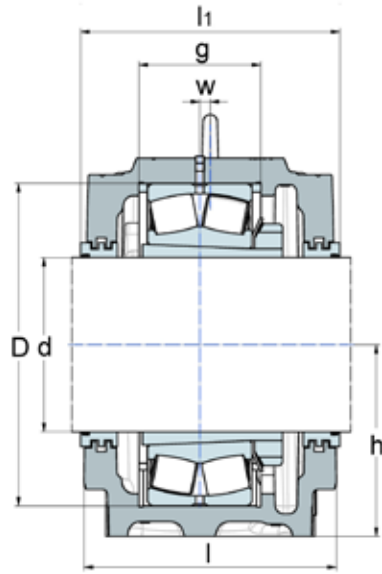
	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	270	331	1	103	M20	TS-40-5-13/16	TA-40-5-13/16	TE-40	22234K	H3134-5-13/16	2	FR310x18x10
	300	387	1 1/4	141	M20	TS-48-5-13/16	TA-48-5-13/16	TE-48	22334K	H2334-5-13/16	2	FR360x10x10
	270	331	1	103	M20	TS-40-5-7/8	TA-40-5-7/8	TE-40	22234K	H3134-5-7/8	2	FR310x18x10
	300	387	1 1/4	141	M20	TS-48-5-7/8	TA-48-5-7/8	TE-48	22334K	H2334-5-7/8	2	FR360x10x10
	240	302	1	73	M16	TS-34-5-15/16	TA-34-5-15/16	TE-34	23134K	HA3134	2	FR280x10x10
	270	331	1	103	M20	TS-40-5-15/16	TA-40-5-15/16	TE-40	22234K	HA3134	2	FR310x18x10
	300	387	1 1/4	141	M20	TS-48-5-15/16	TA-48-5-15/16	TE-48	22334K	HA2334	2	FR360x10x10
	240	302	1	73	M16	TS-34-6	TA-34-6	TE-34	23134K	HE3134	2	FR280x10x10
	270	331	1	103	M20	TS-40-6	TA-40-6	TE-40	22234K	HE3134	2	FR310x18x10
	300	387	1 1/4	141	M20	TS-48-6	TA-48-6	TE-48	22334K	HE2334	2	FR360x10x10
	240	304	1	71	M16	TS-36-6-5/16	TA-36-6-5/16	TE-36	23036K	H3036-6-5/16	2	FR280x17x10
	270	334	1	100	M20	TS-38-6-5/16	TA-38-6-5/16	TE-38	22236K	H3136-6-5/16	2	FR320x19x10
	240	304	1	71	M16	TS-36-6-3/8	TA-36-6-3/8	TE-36	23036K	H3036-6-3/8	2	FR280x17x10
	270	334	1	100	M20	TS-38-6-3/8	TA-38-6-3/8	TE-38	22236K	H3136-6-3/8	2	FR320x19x10
	240	304	1	71	M16	TS-36-6-7/16	TA-36-6-7/16	TE-36	23036K	HA3036	2	FR280x17x10
	250	313	1	83	M16	TS-36-6-7/16	TA-36-6-7/16	TE-36	23136K	HA3136	2	FR300x10x10
	270	334	1	100	M20	TS-38-6-7/16	TA-38-6-7/16	TE-38	22236K	HA3136	2	FR320x19x10

DIMENSION TABLES

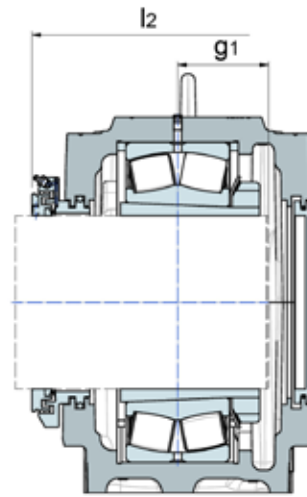


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
165.100	6 1/2	SNCD3036	230	280	510	180	70	108	170	14	230	430	28	34	333	470	100	71/86
165.100	6 1/2	SNCD3136	231	300	530	190	75	116	180	15	240	450	28	34	353	490	110	83/99
165.100	6 1/2	SNCD3138	222	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
171.450	6 3/4	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
171.450	6 3/4	SNCD3138	231	320	560	210	80	124	190	10	260	480	28	34	375	520	120	87/104
171.450	6 3/4	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
171.450	6 3/4	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
173.038	6 13/16	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
173.038	6 13/16	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
173.038	6 13/16	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
174.625	6 7/8	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
174.625	6 7/8	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
174.625	6 7/8	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
176.213	6 15/16	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
176.213	6 15/16	SNCD3138	231	320	560	210	80	124	190	10	260	480	28	34	375	520	120	78/95
176.213	6 15/16	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
176.213	6 15/16	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130

¹⁾ g1 Dimensions apply for bearing



Labyrinth seal TS

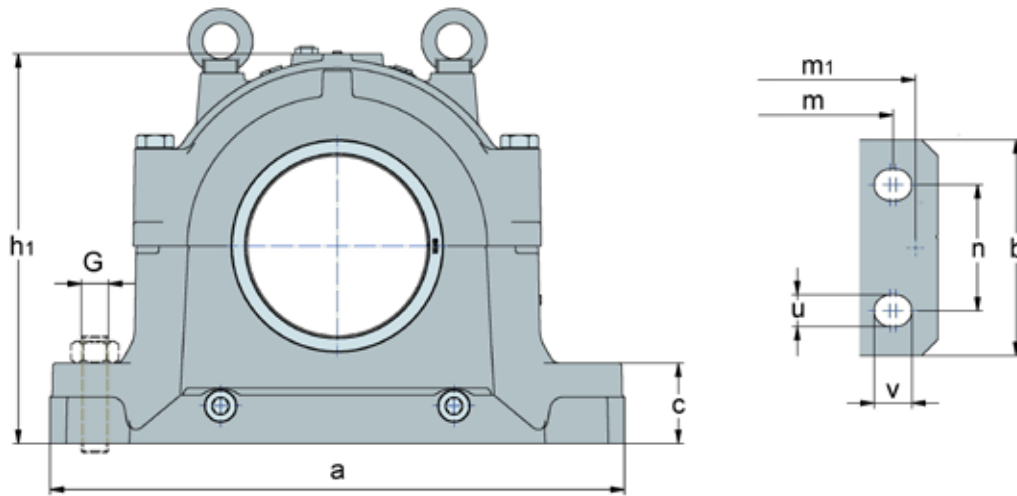


Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	240	304	1	71	M16	TS-36-6-1/2	TA-36-6-1/2	TE-36	23036K	HE3036	2	FR280x17x10
	250	313	1	83	M16	TS-36-6-1/2	TA-36-6-1/2	TE-36	23136K	HE3136	2	FR300x10x10
	270	334	1	100	M20	TS-38-6-1/2	TA-38-6-1/2	TE-38	22236K	HE3136	2	FR320x19x10
	250	318	1	85	M16	TS-38-6-3/4	TA-38-6-3/4	TE-38	23038K	HE3038	4	FR290x10x6,5
	270	334	1	100	M20	TS-38-6-3/4	TA-38-6-3/4	TE-38	23138K	HE3138	2	FR320x10x10
	290	351	1 1/4	129	M20	TS-40-6-3/4	TA-40-6-3/4	TE-40	22238K	HE3138	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-6-3/4	TA-48-6-3/4	TE-48	22338K	HE2338	2	FR400x8x15
	250	318	1	85	M16	TS-38-6-13/16	TA-38-6-13/16	TE-38	23038K	H3038-6-13/16	4	FR290x10x6,5
	290	351	1 1/4	129	M20	TS-40-6-13/16	TA-40-6-13/16	TE-40	22238K	H3138-6-13/16	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-6-13/16	TA-48-6-13/16	TE-48	22338K	H2338-6-13/16	2	FR400x8x15
	250	318	1	85	M16	TS-38-6-7/8	TA-38-6-7/8	TE-38	23038K	H3038-6-7/8	4	FR290x10x6,5
	290	351	1 1/4	129	M20	TS-40-6-7/8	TA-40-6-7/8	TE-40	22238K	H3138-6-7/8	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-6-7/8	TA-48-6-7/8	TE-48	22338K	H2338-6-7/8	2	FR400x8x15
	250	318	1	85	M16	TS-38-6-15/16	TA-38-6-15/16	TE-38	23038K	HA3038	4	FR290x10x6,5
	270	334	1	100	M20	TS-38-6-15/16	TA-38-6-15/16	TE-38	23138K	HA3138	2	FR320x10x10
	290	351	1 1/4	129	M20	TS-40-6-15/16	TA-40-6-15/16	TE-40	22238K	HA3138	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-6-15/16	TA-48-6-15/16	TE-48	22338K	HA2338	2	FR400x8x15

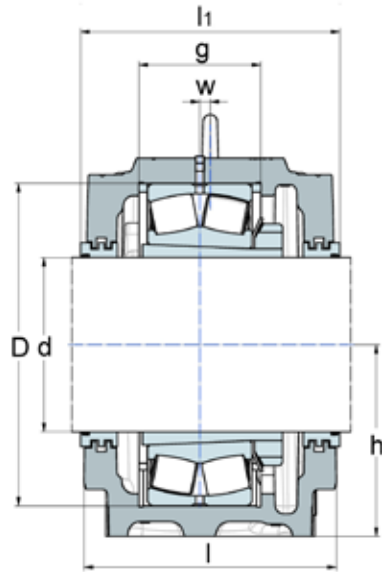
ings centred on the bearing seat

DIMENSION TABLES

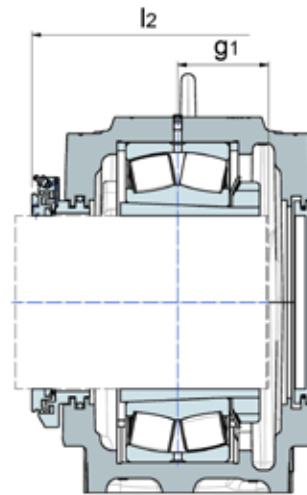


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
177.800	7	SNCD3038	230	290	530	190	75	115	180	15	240	450	28	34	353	490	110	73/89
177.800	7	SNCD3040	230	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
177.800	7	SNCD3140	222	340	610	230	85	132	210	10	280	510	35	42	411	560	130	82/104
177.800	7	SNCD3140	231	340	610	230	85	132	210	10	280	510	35	42	411	560	130	93/114
177.800	7	SNCD3048	222	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
177.800	7	SNCD3148	223	400	700	260	95	148	240	12	310	600	35	42	474	650	150	102/130
177.800	7	SNCD3056	223	420	770	280	100	166	260	16	320	650	42	50	516	720	160	106/133
180.975	7 1/8	SNCD3040	230	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
180.975	7 1/8	SNCD3048	222	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
180.975	7 1/8	SNCD3056	223	420	770	280	100	166	260	16	320	650	42	50	516	720	160	106/133
182.563	7 3/16	SNCD3040	230	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
182.563	7 3/16	SNCD3140	231	340	610	230	85	132	210	10	280	510	35	42	411	560	130	93/114
182.563	7 3/16	SNCD3048	222	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
182.563	7 3/16	SNCD3056	223	420	770	280	100	166	260	16	320	650	42	50	516	720	160	106/133
184.150	7 1/4	SNCD3040	230	310	560	210	80	122	190	10	260	480	28	34	375	520	120	78/94
184.150	7 1/4	SNCD3048	222	360	640	240	90	140	220	12	290	540	35	42	434	590	140	86/109
184.150	7 1/4	SNCD3056	223	420	770	280	100	166	260	16	320	650	42	50	516	720	160	106/133
198.438	7 13/16	SNCD3044	230	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
198.438	7 13/16	SNCD3148	222	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118

¹⁾ g₁ Dimensions apply for bearing



Labyrinth seal TS

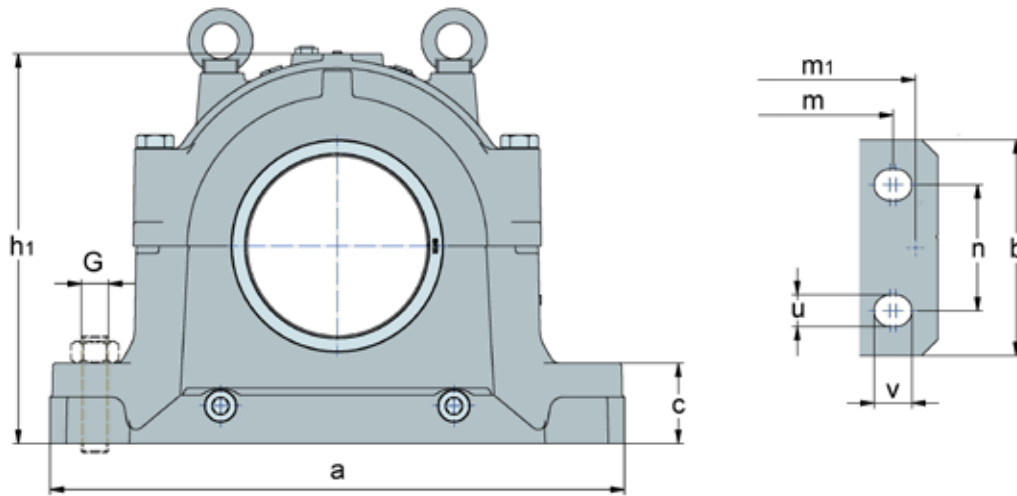


Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	250	318	1	85	M16	TS-38-7	TA-38-7	TE-38	23038K	H3038-7	4	FR290x10x6,5
	270	331	1	103	M20	TS-40-7	TA-40-7	TE-40	23040K	HE3040	4	FR310x10x10
	290	351	1 1/4	129	M20	TS-40-7	TA-40-7	TE-40	22238K	H3140-7	4	FR340x10x10
	290	351	1 1/4	129	M20	TS-40-7	TA-40-7	TE-40	23140K	HE3140	2	FR340x10x10
	300	387	1 1/4	141	M20	TS-48-7	TA-48-7	TE-48	22240K	HE3140	2	FR360x21x10
	315	404	1 1/4	183	M24	TS-48-7	TA-48-7	TE-48	22338K	H2338-7	2	FR400x8x15
	330	413	1 1/2	232	M24	TS-56-7	TA-56-7	TE-56	22340K	HE2340	2	FR420x14x15
	270	331	1	103	M20	TS-40-7-1/8	TA-40-7-1/8	TE-40	23040K	H3040-7-1/8	4	FR310x10x10
	300	387	1 1/4	141	M20	TS-48-7-1/8	TA-48-7-1/8	TE-48	22240K	H3140-7-1/8	2	FR360x21x10
	330	413	1 1/2	232	M24	TS-56-7-1/8	TA-56-7-1/8	TE-56	22340K	H2340-7-1/8	2	FR420x14x15
	270	331	1	103	M20	TS-40-7-3/16	TA-40-7-3/16	TE-40	23040K	HA3040	4	FR310x10x10
	290	351	1 1/4	129	M20	TS-40-7-3/16	TA-40-7-3/16	TE-40	23140K	HA3140	2	FR340x10x10
	300	387	1 1/4	141	M20	TS-48-7-3/16	TA-48-7-3/16	TE-48	22240K	HA3140	2	FR360x21x10
	330	413	1 1/2	232	M24	TS-56-7-3/16	TA-56-7-3/16	TE-56	22340K	HA2340	2	FR420x14x15
	270	331	1	103	M20	TS-40-7-1/4	TA-40-7-1/4	TE-40	23040K	H3040-7-1/4	4	FR310x10x10
	300	387	1 1/4	141	M20	TS-48-7-1/4	TA-48-7-1/4	TE-48	22240K	H3140-7-1/4	2	FR360x21x10
	330	413	1 1/2	232	M24	TS-56-7-1/4	TA-56-7-1/4	TE-56	22340K	H2340-7-1/4	2	FR420x14x15
	290	353	1 1/4	126	M20	TS-44-7-13/16	TA-44-7-13/16	TE-44	23044K	H3044-7-13/16H	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-7-13/16	TA-48-7-13/16	TE-48	22244K	H3144-7-13/16H	4	FR400x10x10

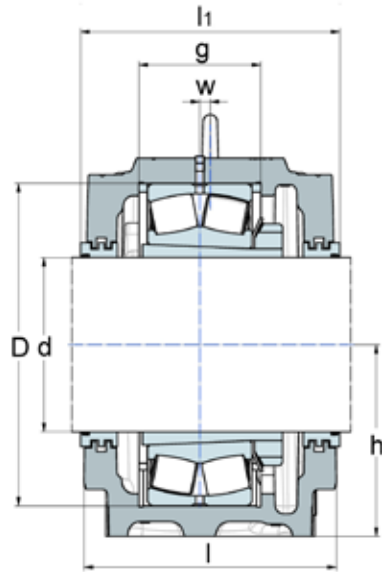
ings centred on the bearing seat

DIMENSION TABLES

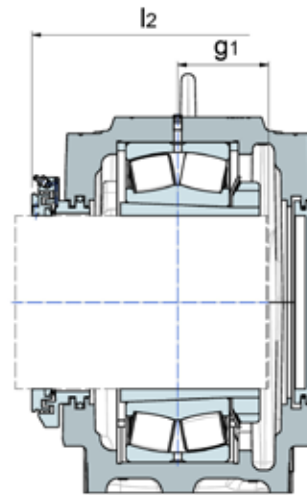


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
200.025	7 7/8	SNCD3044	230	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
200.025	7 7/8	SNCD3148	222	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118
201.613	7 15/16	SNCD3044	230	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
201.613	7 15/16	SNCD3144	231	370	640	240	90	140	220	12	290	540	35	42	434	590	140	100/120
201.613	7 15/16	SNCD3148	222	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118
201.613	7 15/16	SNCD3156	223	460	790	280	105	166	280	16	320	670	42	50	551	740	160	113/139
203.200	8	SNCD3044	230	340	610	230	85	130	210	10	280	510	35	42	411	560	130	80/104
203.200	8	SNCD3148	222	400	700	260	95	148	240	12	310	600	35	42	474	650	150	94/118
214.313	8 7/16	SNCD3048	230	360	640	240	90	140	220	12	290	540	35	42	434	590	140	85/106
214.313	8 7/16	SNCD3152	222	440	770	280	100	164	260	13	320	650	42	50	516	720	160	102/125
215.900	8 1/2	SNCD3048	230	360	640	240	90	140	220	12	290	540	35	42	434	590	140	85/106
215.900	8 1/2	SNCD3152	222	440	770	280	100	164	260	13	320	650	42	50	516	720	160	102/125
227.013	8 15/16	SNCD3048	230	360	640	240	90	140	220	12	290	540	35	42	434	590	140	85/106
227.013	8 15/16	SNCD3148	231	400	700	260	95	148	240	12	310	600	35	42	474	650	150	106/128
227.013	8 15/16	SNCD3152	222	440	770	280	100	164	260	13	320	650	42	50	516	720	160	102/125
227.013	8 15/16	SNCD3160	223	500	830	310	110	180	300	22	350	710	42	50	591	770	190	120/158
239.713	9 7/16	SNCD3052	230	400	700	260	95	148	240	12	310	600	35	42	474	650	150	91/116
239.713	9 7/16	SNCD3152	231	440	770	280	100	164	260	13	320	650	42	50	516	720	160	116/137

¹⁾ g1 Dimensions apply for bearing



Labyrinth seal TS

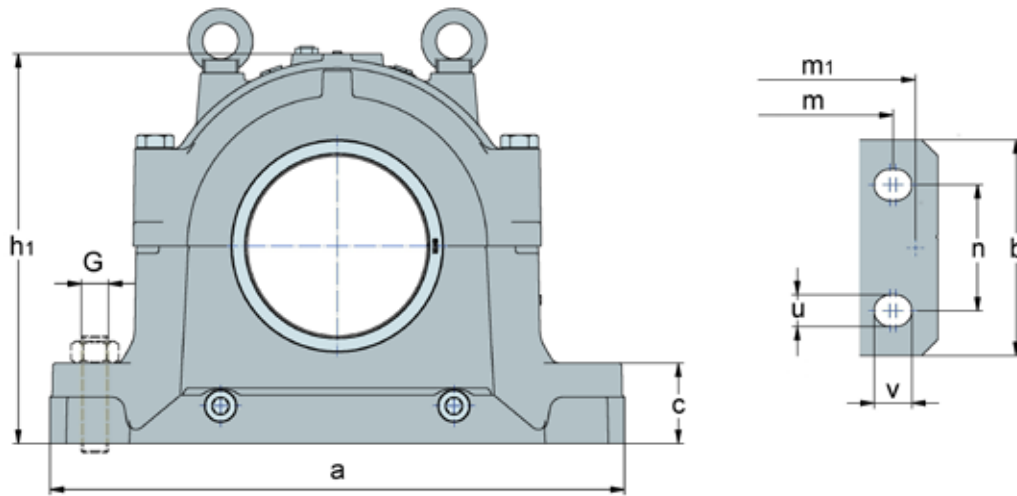


Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	290	353	1 1/4	126	M20	TS-44-7-7/8	TA-44-7-7/8	TE-44	23044K	H3044-7-7/8H	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-7-7/8	TA-48-7-7/8	TE-48	22244K	H3144-7-7/8H	4	FR400x10x10
	290	353	1 1/4	126	M20	TS-44-7-15/16	TA-44-7-15/16	TE-44	23044K	H3044-7-15/16	4	FR340x10x10
	300	361	1 1/4	139	M20	TS-44-7-15/16	TA-44-7-15/16	TE-44	23144K	H3144-7-15/16	2	FR370x10x10
	315	404	1 1/4	183	M24	TS-48-7-15/16	TA-48-7-15/16	TE-48	22244K	H3144-7-15/16	4	FR400x10x10
	330	412	1 1/2	245	M24	TS-56-7-15/16	TA-56-7-15/16	TE-56	22344K	H2344-7-15/16	2	FR460x10,5x12
	290	353	1 1/4	126	M20	TS-44-8	TA-44-8	TE-44	23044K	H3044-8	4	FR340x10x10
	315	404	1 1/4	183	M24	TS-48-8	TA-48-8	TE-48	22244K	H3144-8	4	FR400x10x10
	300	387	1 1/4	141	M20	TS-48-8-7/16	TA-48-8-7/16	TE-48	23048K	H3048-8-7/16H	4	FR360x12x10
	330	414	1 1/2	221	M24	TS-52-8-7/16	TA-52-8-7/16	TE-52	22248K	H3148-8-7/16H	2	FR440x22x10
	300	387	1 1/4	141	M20	TS-48-8-1/2	TA-48-8-1/2	TE-48	23048K	H3048-8-1/2H	4	FR360x12x10
	330	414	1 1/2	221	M24	TS-52-8-1/2	TA-52-8-1/2	TE-52	22248K	H3148-8-1/2H	2	FR440x22x10
	300	387	1 1/4	141	M20	TS-48-8-15/16	TA-48-8-15/16	TE-48	23048K	H3048-8-15/16	4	FR360x12x10
	315	404	1 1/4	183	M24	TS-48-8-15/16	TA-48-8-15/16	TE-48	23148K	H3148-8-15/16	2	FR400x10x10
	330	414	1 1/2	221	M24	TS-52-8-15/16	TA-52-8-15/16	TE-52	22248K	H3148-8-15/16	2	FR440x22x10
	360	442	1 1/2	300	M30	TS-60-8-15/16	TA-60-8-15/16	TE-60	22348K	H2348-8-15/16	2	FR500x12,5x15
	315	397	1 1/4	178	M24	TS-52-9-7/16	TA-52-9-7/16	TE-52	23052K	H3052-9-7/16H	2	FR400x22x10
	330	414	1 1/2	221	M24	TS-52-9-7/16	TA-52-9-7/16	TE-52	23152K	H3152-9-7/16H	2	FR440x10x10

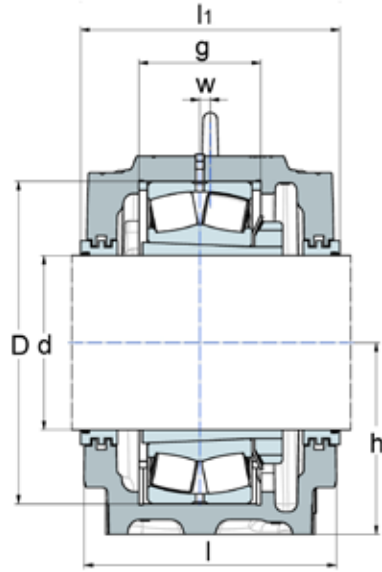
ings centred on the bearing seat

DIMENSION TABLES

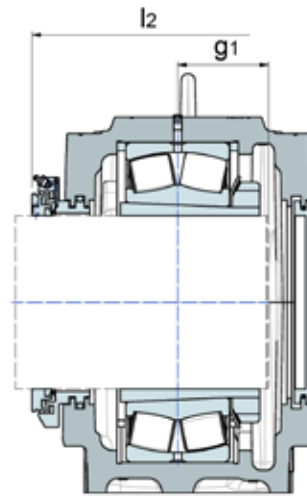


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
241.300	9 1/2	SNCD3052	230	400	700	260	95	148	240	12	310	600	35	42	474	650	150	91/116
241.300	9 1/2	SNCD3152	231	440	770	280	100	164	260	13	320	650	42	50	516	720	160	116/137
241.300	9 1/2	SNCD3064	222	480	830	310	110	181	300	22	350	710	42	50	591	770	190	109/145
241.300	9 1/2	SNCD3164	223	540	880	330	115	196	320	23	370	750	42	50	631	820	200	126/166
252.413	9 15/16	SNCD3056	230	420	770	280	100	166	260	16	320	650	42	50	516	720	160	96/117
254.000	10	SNCD3056	230	420	770	280	100	166	260	16	320	650	42	50	516	720	160	96/117
254.000	10	SNCD3156	231	460	790	280	105	166	280	16	320	670	42	50	551	740	160	119/140
254.000	10	SNCD3160	222	500	830	310	110	180	300	22	350	710	42	50	591	770	190	111/146
265.113	10 7/16	SNCD3056	230	420	770	280	100	166	260	16	320	650	42	50	516	720	160	96/117
265.113	10 7/16	SNCD3156	231	460	790	280	105	166	280	16	320	670	42	50	551	740	160	119/140
265.113	10 7/16	SNCD3160	222	500	830	310	110	180	300	22	350	710	42	50	591	770	190	111/146
265.113	10 7/16	SNCD3168	223	580	950	360	120	210	340	24	400	810	42	50	675	880	220	134/180
266.700	10 1/2	SNCD3056	230	420	770	280	100	166	260	16	320	650	42	50	516	720	160	96/117
266.700	10 1/2	SNCD3156	231	460	790	280	105	166	280	16	320	670	42	50	551	740	160	119/140
266.700	10 1/2	SNCD3160	222	500	830	310	110	180	300	22	350	710	42	50	591	770	190	111/146
266.700	10 1/2	SNCD3168	223	580	950	360	120	210	340	24	400	810	42	50	675	880	220	134/180
277.813	10 15/16	SNCD3060	230	460	790	280	105	168	280	16	320	670	42	50	551	740	160	106/125
277.813	10 15/16	SNCD3160	231	500	830	310	110	180	300	22	350	710	42	50	591	770	190	125/161
277.813	10 15/16	SNCD3164	222	540	880	330	115	196	320	23	370	750	42	50	631	820	200	115/154

¹⁾ g₁ Dimensions apply for bearing



Labyrinth seal TS

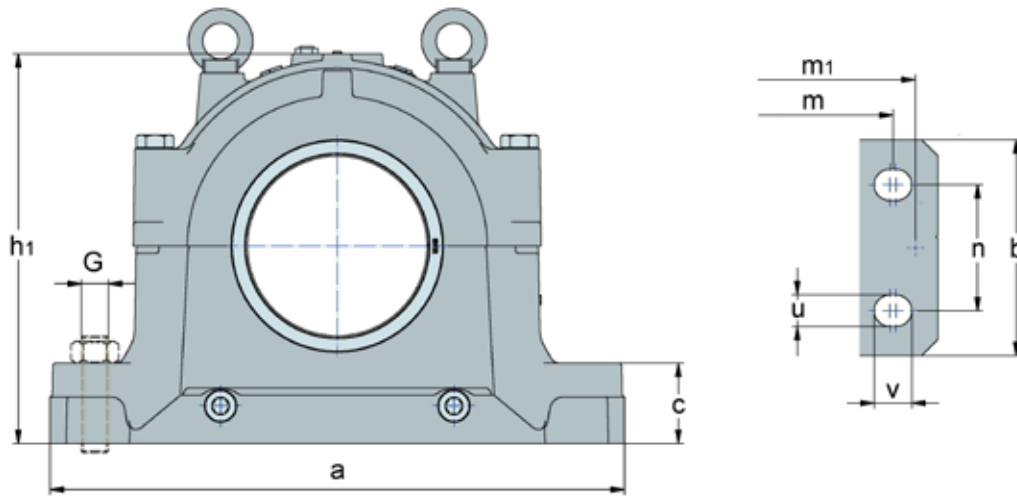


Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	315	397	1 1/4	178	M24	TS-52-9-1/2	TA-52-9-1/2	TE-52	23052K	H3052-9-1/2	2	FR400x22x10
	330	414	1 1/2	221	M24	TS-52-9-1/2	TA-52-9-1/2	TE-52	23152K	H3152-9-1/2	2	FR440x10x10
	360	443	1 1/2	290	M30	TS-64-9-1/2	TA-64-9-1/2	TE-64	22252K	H3152-9-1/2	2	FR480x25,5x12
	380	462	1 1/2	348	M30	TS-64-9-1/2	TA-64-9-1/2	TE-64	22352K	H2352-9-1/2	2	FR540x15,5x15
	330	413	1 1/2	232	M24	TS-56-9-15/16	TA-56-9-15/16	TE-56	23056K	H3056-9-15/16H	6	FR420x10x10
	330	413	1 1/2	232	M24	TS-56-10	TA-56-10	TE-56	23056K	H3056-10H	6	FR420x10x10
	330	412	1 1/2	245	M24	TS-56-10	TA-56-10	TE-56	23156K	H3156-10H	2	FR460x10x10
	360	442	1 1/2	300	M30	TS-60-10	TA-60-10	TE-60	22256K	H3156-10H	2	FR500x25x15
	330	413	1 1/2	232	M24	TS-56-10-7/16	TA-56-10-7/16	TE-56	23056K	H3056-10-7/16H	6	FR420x10x10
	330	412	1 1/2	245	M24	TS-56-10-7/16	TA-56-10-7/16	TE-56	23156K	H3156-10-7/16	2	FR460x10x10
	360	442	1 1/2	300	M30	TS-60-10-7/16	TA-60-10-7/16	TE-60	22256K	H3156-10-7/16	2	FR500x25x15
	410	491	1 1/2	429	M30	TS-68-10-7/16	TA-68-10-7/16	TE-68	22356K	H2356-10-7/16	2	FR580x17,5x15
	330	413	1 1/2	232	M24	TS-56-10-1/2	TA-56-10-1/2	TE-56	23056K	H3056-10-1/2	6	FR420x10x10
	330	412	1 1/2	245	M24	TS-56-10-1/2	TA-56-10-1/2	TE-56	23156K	H3156-10-1/2	2	FR460x10x10
	360	442	1 1/2	300	M30	TS-60-10-1/2	TA-60-10-1/2	TE-60	22256K	H3156-10-1/2	2	FR500x25x15
	410	491	1 1/2	429	M30	TS-68-10-1/2	TA-68-10-1/2	TE-68	22356K	H2356-10-1/2	2	FR580x17,5x15
	330	412	1 1/2	240	M24	TS-60-10-15/16	TA-60-10-15/16	TE-60	23060K	H3060-10-15/16H	2	FR460x25x10
	360	442	1 1/2	300	M30	TS-60-10-15/16	TA-60-10-15/16	TE-60	23160K	H3160-10-15/16H	2	FR500x10x10
	380	462	1 1/2	348	M30	TS-64-10-15/16	TA-64-10-15/16	TE-64	22260K	H3160-10-15/16H	2	FR540x28x12

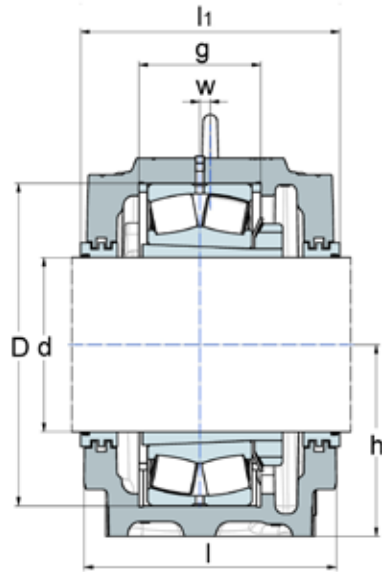
ings centred on the bearing seat

DIMENSION TABLES

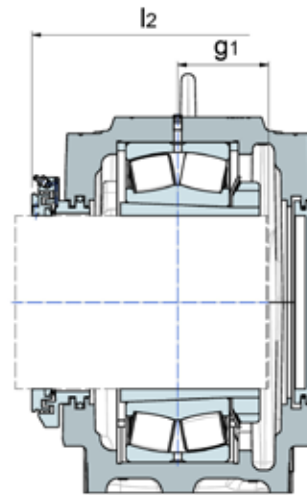


Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g _{1min/max} ¹⁾
279.400	11	SNCD3060	230	460	790	280	105	168	280	16	320	670	42	50	551	740	160	106/125
279.400	11	SNCD3160	231	500	830	310	110	180	300	22	350	710	42	50	591	770	190	125/161
279.400	11	SNCD3164	222	540	880	330	115	196	320	23	370	750	42	50	631	820	200	115/154
290.513	11 7/16	SNCD3064	230	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
292.100	11 1/2	SNCD3064	230	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
303.213	11 15/16	SNCD3064	230	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
303.213	11 15/16	SNCD3164	231	540	880	330	115	196	320	23	370	750	42	50	631	820	200	135/172
304.800	12	SNCD3064	230	480	830	310	110	181	300	22	350	710	42	50	591	770	190	108/141
304.800	12	SNCD3164	231	540	880	330	115	196	320	23	370	750	42	50	631	820	200	135/172
315.913	12 7/16	SNCD3068	230	520	880	330	115	197	320	23	370	750	42	50	631	820	200	117/150
315.913	12 7/16	SNCD3168	231	580	950	360	120	210	340	24	400	810	42	50	675	880	220	155/188
317.500	12 1/2	SNCD3068	230	520	880	330	115	197	320	23	370	750	42	50	631	820	200	117/150
317.500	12 1/2	SNCD3168	231	580	950	360	120	210	340	24	400	810	42	50	675	880	220	155/188
328.613	12 15/16	SNCD3072	230	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
330.200	13	SNCD3072	230	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
341.313	13 7/16	SNCD3072	230	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
341.313	13 7/16	SNCD3172	231	600	1000	360	120	212	350	30	400	840	42	50	695	920	220	159/194
342.900	13 1/2	SNCD3072	230	540	880	330	115	198	320	23	370	750	42	50	631	820	200	117/150
342.900	13 1/2	SNCD3172	231	600	1000	360	120	212	350	30	400	840	42	50	695	920	220	159/194

¹⁾ g₁ Dimensions apply for bearing



Labyrinth seal TS

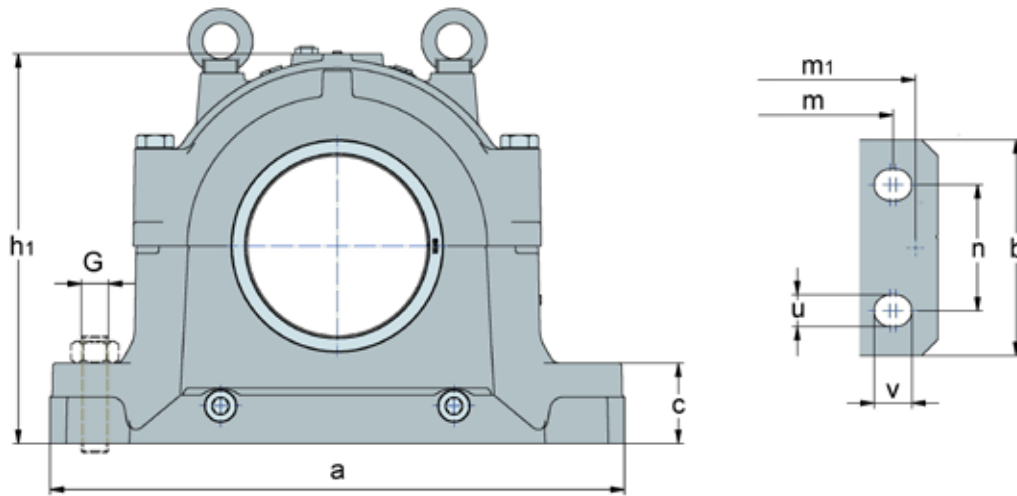


Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	330	412	1 1/2	240	M24	TS-60-11	TA-60-11	TE-60	23060K	H3060-11H	2	FR460x25x10
	360	442	1 1/2	300	M30	TS-60-11	TA-60-11	TE-60	23160K	H3160-11H	2	FR500x10x10
	380	462	1 1/2	348	M30	TS-64-11	TA-64-11	TE-64	22260K	H3160-11H	2	FR540x28x12
	360	443	1 1/2	290	M30	TS-64-11-7/16	TA-64-11-7/16	TE-64	23064K	H3064-11-7/16H	6	FR480x10x10
	360	443	1 1/2	290	M30	TS-64-11-1/2	TA-64-11-1/2	TE-64	23064K	H3064-11-1/2H	6	FR480x10x10
	360	443	1 1/2	290	M30	TS-64-11-15/16	TA-64-11-15/16	TE-64	23064K	H3064-11-15/16	6	FR480x10x10
	380	462	1 1/2	348	M30	TS-64-11-15/16	TA-64-11-15/16	TE-64	23164K	H3164-11-15/16	2	FR540x10x10
	360	443	1 1/2	290	M30	TS-64-12	TA-64-12	TE-64	23064K	H3064-12	6	FR480x10x10
	380	462	1 1/2	348	M30	TS-64-12	TA-64-12	TE-64	23164K	H3164-12	2	FR540x10x10
	380	461	1 1/2	365	M30	TS-68-12-7/16	TA-68-12-7/16	TE-68	23068K	H3068-12-7/16H	4	FR520x16x10
	410	491	1 1/2	429	M30	TS-68-12-7/16	TA-68-12-7/16	TE-68	23168K	H3168-12-7/16H	2	FR580x10x10
	380	461	1 1/2	365	M30	TS-68-12-1/2	TA-68-12-1/2	TE-68	23068K	H3068-12-1/2H	4	FR520x16x10
	410	491	1 1/2	429	M30	TS-68-12-1/2	TA-68-12-1/2	TE-68	23168K	H3168-12-1/2H	2	FR580x10x10
	380	461	1 1/2	336	M30	TS-72-12-15/16	TA-72-12-15/16	TE-72	23072K	H3072-12-15/16H	4	FR540x16x10
	380	461	1 1/2	336	M30	TS-72-13	TA-72-13	TE-72	23072K	H3072-13H	4	FR540x16x10
	380	461	1 1/2	336	M30	TS-72-13-7/16	TA-72-13-7/16	TE-72	23072K	H3072-13-7/16	4	FR540x16x10
	410	491	1 1/2	455	M36	TS-72-13-7/16	TA-72-13-7/16	TE-72	23172K	H3172-13-7/16	2	FR600x10x10
	380	461	1 1/2	336	M30	TS-72-13-1/2	TA-72-13-1/2	TE-72	23072K	H3072-13-1/2	4	FR540x16x10
	410	491	1 1/2	455	M36	TS-72-13-1/2	TA-72-13-1/2	TE-72	23172K	H3172-13-1/2	2	FR600x10x10

ings centred on the bearing seat

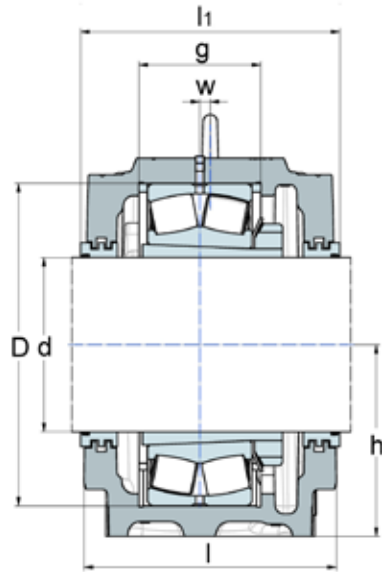
DIMENSION TABLES



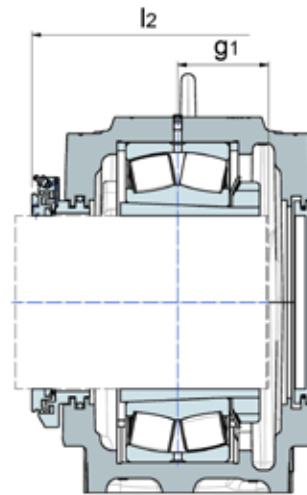
Shaft diameter d		Housing designation	Bearing series	Housing dimensions [mm]														
[mm]	[inch]			D	a	b	c	g	h	W	l	m	u	v	h1	m1	n	g1 _{min/max} ¹⁾
354.013	13 15/16	SNCD3076	230	560	950	360	120	180	340	24	400	810	42	50	675	880	220	121/175
354.013	13 15/16	SNCD3176	231	620	1040	360	120	214	360	30	400	870	42	50	715	960	220	162/194
355.600	14	SNCD3076	230	560	950	360	120	180	340	24	400	810	42	50	675	880	220	121/175
355.600	14	SNCD3176	231	620	1040	360	120	214	360	30	400	870	42	50	715	960	220	162/194
381.000	15	SNCD3080	230	600	1000	360	120	192	350	30	400	840	42	50	695	920	220	131/182
381.000	15	SNCD3180	231	650	1120	390	125	220	380	30	430	950	48	60	775	1020	240	167/209
400.050	15 3/4	SNCD3084	230	620	1040	360	120	194	360	30	400	870	42	50	715	960	220	132/182
400.050	15 3/4	SNCD3184	231	700	1170	420	130	244	410	35	460	1000	48	60	810	1070	260	187/229
419.100	16 1/2	SNCD3088	230	650	1120	390	125	200	380	30	430	950	48	60	775	1020	240	144/197
419.100	16 1/2	SNCD3188	231	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	188/229
431.800	17	SNCD3092	230	680	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	147/208
457.200	18	SNCD3096	230	700	1170	420	130	224	410	35	460	1000	48	60	810	1070	260	148/209
469.900	18 1/2	SNCD30/500	230	720	1220	430	135	246	420	35	460	1030	48	60	835	1120	260	157/209

¹⁾ g1 Dimensions apply for bearing

Ø 13 15/16 - 18 1/2



Labyrinth seal TS



Taconite seal TA
Cover TE

	Total width across seal		Housing			Seals / spherical roller bearing / accessories						
	l1	l2	Foot bolts G	Weight [kg]	Eye bolt DIN 580	Labyrinth seal	Taconite seal	Cover	Bearings	Adapter sleeve	Number of locating rings	Locating ring
	410	492	1 1/2	448	M30	TS-76-13-15/16	TA-76-13-15/16	TE-76	23076K	H3076-13-15/16H	2	FR560x22,5x10
	410	491	1 1/2	480	M36	TS-76-13-15/16	TA-76-13-15/16	TE-76	23176K	H3176-13-15/16H	2	FR620x10x15
	410	492	1 1/2	448	M30	TS-76-14	TA-76-14	TE-76	23076K	H3076-14H	2	FR560x22,5x10
	410	491	1 1/2	480	M36	TS-76-14	TA-76-14	TE-76	23176K	H3176-14H	2	FR620x10x15
	410	492	1 1/2	446	M36	TS-80-15	TA-80-15	TE-80	23080K	H3080-15	2	FR600x22x10
	440	521	1 3/4	602	M42	TS-80-15	TA-80-15	TE-80	23180K	H3180-15	2	FR650x10x15
	410	492	1 1/2	471	M36	TS-84-15-3/4	TA-84-15-3/4	TE-84	23084K	H3084-15-3/4	2	FR620x10x15
	470	551	1 3/4	722	M42	TS-84-15-3/4	TA-84-15-3/4	TE-84	23184K	H3184-15-3/4	2	FR700x10x15
	440	522	1 3/4	593	M42	TS-88-16-1/2	TA-88-16-1/2	TE-88	23088K	H3088-16-1/2H	2	FR650x21,5x15
	470	551	1 3/4	761	M42	TS-88-16-1/2	TA-88-16-1/2	TE-88	23188K	H3188-16-1/2H	2	FR720x10x15
	470	561	1 3/4	749	M42	TS-92-17	TA-92-17	TE-92	23092K	H3092-17H	2	FR680x30,5x15
	470	561	1 3/4	707	M42	TS-96-18	TA-96-18	TE-96	23096K	H3096-18H	2	FR700x29,5x15
	470	561	1 3/4	743	M42	TS-500-18-1/2	TA-500-18-1/2	TE-500	230/500K	H30/500-18-1/2	2	FR720x29,5x15

ings centred on the bearing seat

SERVICES

Experts & Tools

The NTN-SNR team of experts can support your organisation to obtain the best performance from your bearings and your operations



Training

Improve the skills of your maintenance technicians and designers in bearing selection and maintenance.

Whether at our training school or on your premises with our BEBOX van, we can provide made-to-measure training courses covering both theory and practice, because all customers are different. Our teaching methods make the difference!



Bearing diagnosis

Let our experts determine the causes of your bearing failures in our lab or on your site. Our reactivity and advice can provide the keys to your improvements.



Bearing reconditioning & Machine tool spindle repair

Have your industrial bearings reconditioned by a company used to renovating aircraft jet engine & bullet train bearings.



Technical assistance for bearings and lubrication systems

Contact our specialists to organize your maintenance work: mounting and dismantling bearings, manufacturing, maintenance and extension of lubricating systems, shaft alignment using the laser technique. With BEBOX, our mobile training concept, we are always there for you!



Organization of maintenance system

Benefit from an unbiased assessment of your maintenance organization system by our industrial maintenance experts. Boost your productivity with the action plan proposed by NTN-SNR



Tool rental

Experts & Tools offers a wide range of large bearing maintenance tools for rent: induction heaters, hydraulic nuts, pumps...





LARGE PLUMMER BLOCK HOUSINGS

SNCD

This document is the exclusive property of NTN-SNR ROULEMENTS. Any total or partial reproduction hereof without the prior consent of NTN-SNR ROULEMENTS is strictly prohibited. Legal action may be brought against anyone breaching the terms of this paragraph.

NTN-SNR ROULEMENTS shall not be held liable for any errors or omissions that may have crept into this document despite the care taken in drafting it. Due to our policy of continuous research and development, we reserve the right to make changes without notice to all or part of the products and specifications mentioned in this document.

© NTN-SNR ROULEMENTS, international copyright 2022.

NTN-SNR ROULEMENTS - 1 rue des Usines - 74000 Annecy

RCS ANNECY B 325 821 072 - Code APE 2815Z - Code NACE 28.15

www.ntn-snr.com



With You

