

# Split Pillow Block Housings & Accessories

Version  
**2.0**





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## SNN HOUSING NO.

The SNN series comprises a number of housings which, when combined with different seal options and ball or spherical roller bearings, provides an answer for most plummer block applications with shaft diameters ranging from 3/4" to 5.1/2" (20mm to 140mm).

### HOW TO ORDER

When ordering a complete assembly, you will receive the following components (e.g. SNN22517-215G):

- 1 - SNN517 housing
- 1 - G517 double-lip seal for a 2.15/16" shaft
- 1 - 22217EAKE4 spherical roller bearing
- 1 - HA317 adapter sleeve

If the assembly is to be fixed, add the letter 'X' to the assembly part number, e.g. SNN22517-215GX, you will receive 2 fixing rings FR150X12.5. You must specify the number of fixed assemblies at time of ordering.

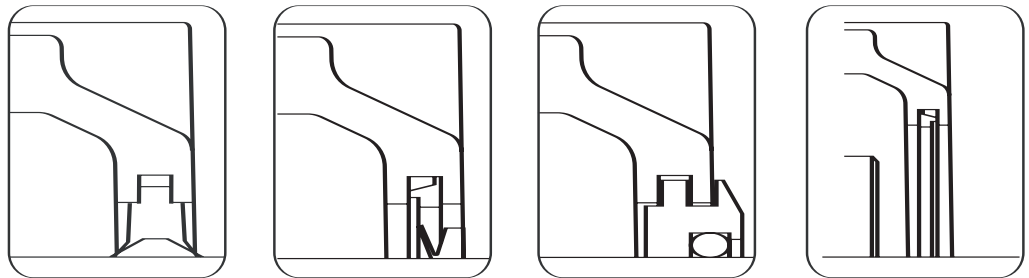
**Note:** Only one assembly per shaft should be fixed.

If one side of the housing will be closed, add the letter 'Y' to the assembly part number, e.g. SNN22517-215GY. You will receive one end cover A517.

### SNN22517-215GX3

SEAL	G = Rubber 'G' seal, V = V-Ring seal, T = TS seal
FIXED / FLOATING	X = fixed, Blank = floating
END COVER	Y = end cover, Blank = no end cover
RIC	Radial Internal Clearance is shown as C3, C4, etc. Normal Clearance (CN) is left blank.

### SEAL TYPES AND THEIR FEATURES



		CONTACT		NON-CONTACT	END COVER
		G-LOK SEAL	V-RING SEAL	TS-RING SEAL	AXXX
Max. speed		5 m/s	7 m/s	-	-
Grease Lubrication		Excellent	Excellent	Good	-
Oil Lubrication		Fair	Good	Excellent	-
Friction torque		Good	Good	Excellent	-
Temperature range		-20 thru +80°C	-20 thru +80°C	-20 thru +120°C	-20 thru +120°C
Performance	Dust	Excellent	Excellent	Good	-
	Large particles	Good	Poor	Good	-
	Water	Good	Good	Poor	-

## SAFD HOUSING NO.

### HOW TO ORDER

When ordering a complete unit, you will receive the following components (e.g. SAFD22520-307):

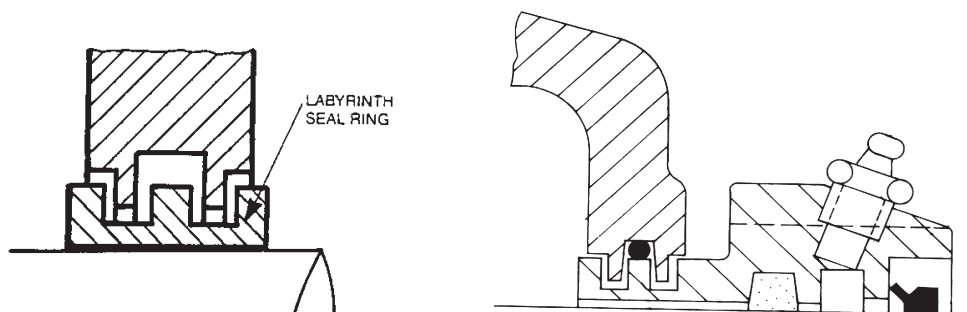
- 1 - SAFD520
- 1 - 22220EAKE4 Spherical roller bearing
- 1 - HA320 Adapter sleeve
- 2 - LER-102 Seals
- 1 - FR180X10 Fixing ring

**Note:** If not a standard shaft, the rings and seals are sold separately.

### SAFD22517-215TXYC3

SEAL	Blank = LER, T = Taconite (TER)
FIXED / FLOATING	X = fixed, Blank = floating
END COVER	Y = end cover, Blank = no end cover
RIC	Radial Internal Clearance is shown as C3, C4, etc. Normal Clearance (CN) is left blank.

### SEAL TYPES AND THEIR FEATURES



		NON-CONTACT	NON-CONTACT
		LER SEAL	TER SEAL
Max. speed		Same as bearing's limiting speed	7 m/s
Grease Lubrication		Good	Excellent
Oil Lubrication		Good	Excellent
Friction torque		Excellent	Good
Temperature range		Same as the bearing range	-40 thru +100°C
Performance	Dust	Good	Excellent
	Large particles	Good	Excellent
	Water	Poor	Excellent

## FEATURES AND BENEFITS

SNN - Grey Cast Iron



SAFD - Ductile Iron



- High-grade bolts
- Square-shape base – Facilitates alignment
- High-precision bore – Maximizes bearing performance
- Seal groove for various types of seals
- Ideal casting design – High strength, rigid, and lightweight
- Threaded hole for grease nipple – Plug for threaded hole is standard
- Ideally shaped stiffer design
- Large oil bath – Prolongs oil change interval
- Webs for heat transfer
- Rib for bearing seat – Prevents deformation of bearing seat
- Ribs to minimize deformation caused by tightening the mounting bolts
- Solid corners for locating pins
- Center marks – Facilitates alignment



# CLEARANCE ADJUSTMENT FOR SPHERICAL ROLLER BEARINGS WITH TAPERED BORE

Table 1

Nominal Bore Dia.		Unmounted Clearance Tapered Bore						Reduction in Radial Clearance		Axial Movement <sup>(1)</sup> Taper 1 : 12		Minimum Permissible Residual Clearance		
		CN		C3		C4								
over	incl	min	max	min	max	min	max	Min	Max	Min	Max	CN	C3	C4
mm		in		in		in		in		in		in		
24	30	0.0012	0.0016	0.0016	0.0022	0.0022	0.0030	0.0006	0.0008	0.0120	0.0140	0.0006	0.0008	0.0014
30	40	0.0014	0.0020	0.0020	0.0026	0.0026	0.0033	0.0010	0.0012	0.0158	0.0177	0.0004	0.0010	0.0014
40	50	0.0018	0.0024	0.0024	0.0032	0.0032	0.0039	0.0012	0.0014	0.0177	0.0217	0.0006	0.0012	0.0018
50	65	0.0022	0.0030	0.0030	0.0037	0.0037	0.0047	0.0012	0.0014	0.0177	0.0217	0.0010	0.0014	0.0024
65	80	0.0028	0.0037	0.0037	0.0047	0.0047	0.0059	0.0016	0.0018	0.0236	0.0276	0.0012	0.0016	0.0030
80	100	0.0032	0.0043	0.0043	0.0055	0.0055	0.0071	0.0018	0.0022	0.0276	0.0335	0.0014	0.0020	0.0034
100	120	0.0039	0.0053	0.0053	0.0067	0.0067	0.0087	0.0020	0.0024	0.0295	0.0354	0.0018	0.0026	0.0043
120	140	0.0047	0.0063	0.0063	0.0079	0.0079	0.0102	0.0024	0.0028	0.0354	0.0433	0.0022	0.0032	0.0051
140	160	0.0051	0.0071	0.0071	0.0091	0.0091	0.0118	0.0026	0.0032	0.0394	0.0512	0.0024	0.0039	0.0059

<sup>(1)</sup>Valid for solid steel shafts only

The inner rings of tapered bore spherical roller bearings are always mounted with an interference fit. The farther the bearing is pushed up the taper, the greater the degree of interference and the greater the reduction of internal radial clearance within the bearing. It is necessary to measure this reduction as you mount the bearing to the shaft in order to have a properly functioning bearing. Use the following steps:

- 1** Do not start this procedure until you are ready to mount the bearing. If the mounting process is interrupted, cover the bearing and workspace to prevent contamination.
- 2** Start with a clean workspace ensuring that bench and tools are free from dirt, dust or other contaminants.
- 3** Remove the bearing from its container and inner wrap, standing the bearing upright on the bench. Rotate the inner ring of the bearing slowly for one revolution so that the rolling elements align themselves with the raceways. Make sure the inner ring is parallel with the outer ring.
- 4** Referring to Table 1, select as a starting point a feeler gauge in the mid-range of the bearings' unmounted clearance.

- 5** Using the top set of rollers, work the feeler gauge between the roller and the outer raceway. The correct gauge will create a slight resistance. Ensure that the gauge is being worked over both of the top rollers of each raceway for a correct reading. Your reading should be within the values in Table 1.
- 6** For a reading at the high end, use the maximum reduction value from Table 2. For a reading at the lower end, use the lower value from Table 2. Subtract the value you determine from Table 2 from Table 1. This is the final or residual clearance and cannot be less than the minimum residual clearance shown in Table 2. Write down what your final clearance should be after mounting.
- 7** Position the bearing and adapter sleeve on the shaft and tighten the lock nut, measuring the internal clearance at regular intervals, until the final clearance is reached. With the bearing suspended on the shaft, the clearance readings are taken at the bottom rather than the top.
- 8** Secure the lock washer tab in place. If necessary, continue to tighten the lock nut to align the washer tab and slot. Do not back off the lock nut to achieve this.

## SHAFT TOLERANCE LIMITS FOR ADAPTER MOUNT

Imperial shaft tolerances for bearings with adapter mount are shown in table 3. These values may be converted to millimeters for metric sizes. For conversion to millimeters multiply by 25.4.

Nominal Shaft Diameter		Diameter Tolerances		Max. Permissible Taper and Ovality
over	incl.	max	min	
.394	.709	+0.00	-.0017	.0003
.709	1.181	+0.00	-.0020	.0004
1.181	1.969	+0.00	-.0024	.0004
1.969	3.150	+0.00	-.0029	.0005
3.150	4.724	+0.00	-.0034	.0006
4.724	7.087	+0.00	-.0039	.0007

Table 3

## MOUNTING THE SNN SPLIT HOUSING USING G-LOK SEALS



**Note:** Remove any paint and burrs from the cap and base at the housing split and thoroughly clean the housing and bearing area.

- 1** Remove the top half of the bearing housing to expose the bearing seat.
- 2** Place the housing base in position and hand tighten the fixing bolts.
- 3** The G-LOK kit includes four halves (2 Seals). Fit the halves into the seal grooves machined in the base and top of the housing. To aid the lubrication of the running lips and sealing properties of the G-LOK, fill the u-section of the seal with grease.
- 4** Mount the bearing on the shaft and fill with grease.
- 5** Place the shaft and bearing assembly on the lower half of the split housing.
- 6** For the assembly that locates the system, fit the locating rings on either side of the bearing. Where only one is supplied fit it on the same side as the tapered sleeve lock nut.
- 7** Check the housings for alignment with each other, ensuring that they are within acceptable limits and that the fixing bolts are tightened sufficiently to secure the base.
- 8** The top half of the housing should be carefully aligned with the locating dowel pins and the bolts tightened. Be sure that the split housing is paired only with its original top half, as these parts are not interchangeable from one housing to another.
- 9** The fixing bolts can then be fully tightened.



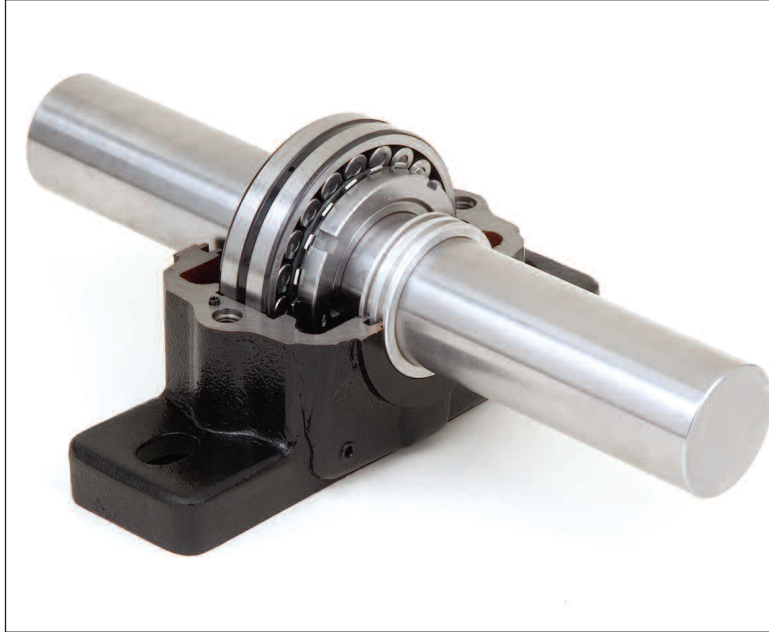
## MOUNTING THE SNN SPLIT HOUSING WITH OPEN V-RING SEALS



**Note:** Remove any paint and burrs from the cap and base at the housing split and thoroughly clean the housing and bearing area.

- 1** Remove the top half of the bearing housing to expose the bearing seat.
- 2** Place the housing base in position and hand tighten the fixing bolts.
- 3** Place a V-RING and counterface washer on the shaft. The counterface washer should be positioned to align with the seal groove machined in the housing and the V-RING.
- 4** Mount the bearing on the shaft and charge with grease.
- 5** Place the second V-RING and the counterface washer on the shaft.
- 6** The shaft and bearing assembly with the sealing components can then be lowered into the base of the housing, taking care to locate the rubber lip of the counterface washer in the split housing seal groove.
- 7** For the assembly that locates the system, fit the locating rings on either side of the bearing. Where only one is supplied fit it on the same side as the tapered sleeve lock nut.
- 8** Check the housings for alignment with each other, ensuring that they are within acceptable limits and that the fixing bolts are tight enough to secure the base.
- 9** The top half of the housing should be carefully aligned with the locating dowel pins and the bolts tightened. Be sure that the split housing is paired only with its original top half, as these parts are not interchangeable from one housing to another.
- 10** The fixing bolts can then be fully tightened.
- 11** The rubbing surfaces of the counterface washer should be smeared with grease to help reduce friction.
- 12** To ensure effective sealing, the V-RINGS should then be moved axially along the shaft until their sealing lips are in the correct location relative to the washers. A convenient way of moving the V-RINGS along the shaft is to use the shank of a long screwdriver while rotating the shaft and working the V-RING into position by hand.

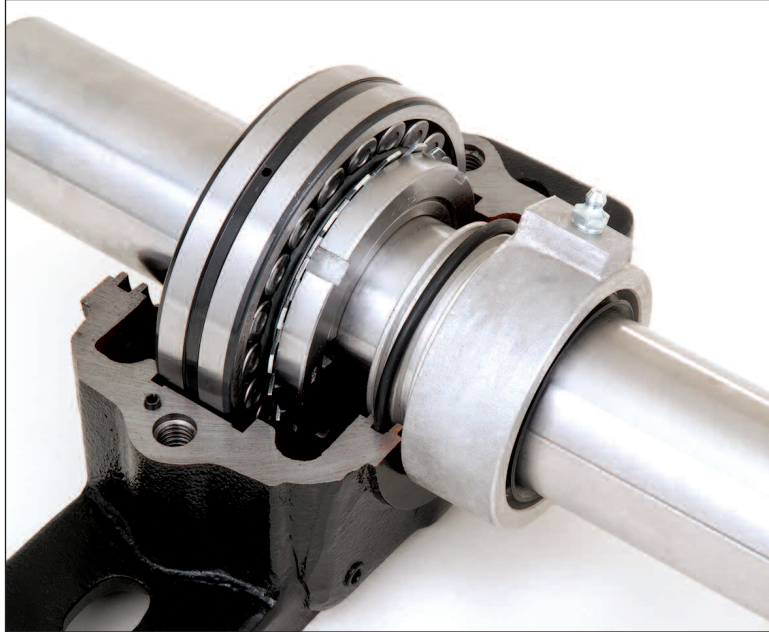
## MOUNTING THE SAFD SPLIT HOUSING USING LER SEALS



**Note:** Remove any paint and burrs from the cap and base at the housing split and thoroughly clean the housing and all components.

- 1** Remove the top half of the bearing housing to expose the bearing seat.
- 2** Place the housing base in position and hand tighten the fixing bolts.
- 3** Place one LER seal on the shaft.
- 4** Mount bearing on the shaft and charge with grease.
- 5** Place the other LER seal on the shaft.
- 6** The shaft and bearing assembly with the sealing components can then be lowered into the base of the housing.
- 7** For the assembly that locates the system, fit the locating rings on either side of the bearing. Where only one is supplied, fit it on the same side as the tapered sleeve lock nut.
- 8** Check the housings for alignment with each other, ensuring that they are within acceptable limits and that the fixing bolts are tight enough to secure the base.
- 9** The top half of the housing should be carefully aligned with the locating dowel pins and the bolts tightened. Be sure that the split housing is paired only with its original top half, as these parts are not interchangeable from one housing to another.
- 10** The fixing bolts can then be fully tightened.

## MOUNTING THE SAFD SPLIT HOUSING USING TER (TACONITE) SEALS



**Note:** Remove any paint and burrs from the cap and base at the housing split and thoroughly clean the housing and all components.

- 1** Remove the top half of the bearing housing to expose the bearing seat.
- 2** Place the housing base in position and hand tighten the fixing bolts.
- 3** Soak the felt strips in oil for a few minutes and then place one on the inside inboard groove of each seal. Add grease inside the next groove.
- 4** Slide the flush side of the V-ring on the shaft. V-ring will require stretching.
- 5** Slide the labyrinth seal towards the bearing location and the labyrinth insert with the O-ring on its outside diameter, in this order, on the shaft. Adjust the V-ring so that it rests inside the counterbore.
- 6** Mount bearing on the shaft and charge with grease until the bottom half of the housing is filled one-third full.
- 7** Following the procedure in step 3 above, place the other labyrinth seal on the shaft, reversing the order.
- 8** The shaft and bearing assembly with the sealing components can then be lowered into the base of the housing.
- 9** For the assembly that locates the system, fit the locating rings on either side of the bearing. Where only one is supplied, fit it on the same side as the tapered sleeve lock nut.
- 10** Check the housings for alignment with each other, ensuring that they are within acceptable limits and that the fixing bolts are tight enough to secure the base.
- 11** The top half of the housing should be carefully aligned with the locating dowel pins and bolts tightened. Be sure that the split housing is paired only with its original top half, as these parts are not interchangeable from one housing to another.
- 12** The fixing bolt can then be fully tightened.

# SNN SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
3/4	SNN505	1205K	HE205	G505	V505,TS505E	FR52X5	2	A505	SNN1505-012	2.3
	SNN506-605	1305K	HE305	G605	V605,TS605E	FR62X7.5	2	A605	SNN1605-012	2.3
20	SNN505	1205K	H205	G505	V505,TS505	FR52X5	2	A505	SNN1505-20	2.3
	SNN505	2205K	H305	G505	V505,TS505	FR52X7	1	A505	SNN2505-20	2.3
	SNN505	22205K	H305	G505	V505,TS505	FR52X7	1	A505	SNN22505-20	2.3
	SNN506-605	1305K	H305	G605	V605,TS605	FR62X7.5	2	A605	SNN1605-20	2.3
	SNN506-605	21305K	H305	G605	V605,TS605	FR62X7.5	2	A605	SNN21605-20	2.3
	SNN506-605	2305K	H2305	G605	V605,TS605	FR62X8	1	A605	SNN2605-20	2.4
15/16	SNN506-605	1206K	HA206	G506	V506,TS506A	FR62X8	2	A506	SNN1506-015	2.3
	SNN507-606	1306K	HA306	G606	V606,TS606A	FR72X7.5	2	A606	SNN1606-015	2.7
	SNN507-606	2306K	HA2306	G606	V606,TS606A	FR72X7	1	A606	SNN2606-015	2.8
25	SNN506-605	1206K	H206	G506	V506,TS506	FR62X8	2	A506	SNN1506-25	2.3
	SNN506-605	2206K	H306	G506	V506,TS506	FR62X12	1	A506	SNN2506-25	2.4
	SNN506-605	22206K	H306	G506	V506,TS506	FR62X12	1	A506	SNN22506-25	2.4
	SNN507-606	1306K	H306	G606	V606,TS606	FR72X7.5	2	A606	SNN1606-25	2.7
	SNN507-606	21306K	H306	G606	V606,TS606	FR72X7.5	2	A606	SNN21606-25	2.7
	SNN507-606	2306K	H2306	G606	V606,TS606	FR72X7	1	A606	SNN2606-25	2.8
1	SNN506-605	1206K	HE206	G506	V506,TS506E	FR62X8	2	A506	SNN1506-100	2.3
	SNN507-606	1306K	HE306	G606	V606,TS606E	FR72X7.5	2	A606	SNN1606-100	2.7
	SNN507-606	2306K	HE2306	G606	V606,TS606E	FR72X7	1	A606	SNN2606-100	2.8
30	SNN507-606	1207K	H207	G507	V507,TS507	FR72X8.5	2	A507	SNN1507-30	2.7
	SNN507-606	2207K	H307	G507	V507,TS507	FR72X11	1	A507	SNN2507-30	2.7
	SNN507-606	22207K	H307	G507	V507,TS507	FR72X11	1	A507	SNN22507-30	2.8
	SNN508-607	1307K	H307	G607	V607,TS607	FR80X9	2	A607	SNN1607-30	3.6
	SNN508-607	21307K	H307	G607	V607,TS607	FR80X9	2	A607	SNN21607-30	3.6
	SNN508-607	2307K	H2307	G607	V607,TS607	FR80X8	1	A607	SNN2607-30	3.7
1.3/16	SNN507-606	1207K	HA207	G507	V507,TS507A	FR72X8.5	2	A507	SNN1507-103	2.7
	SNN508-607	1307K	HA307	G607	V607,TS607A	FR80X9	2	A607	SNN1607-103	3.6
	SNN508-607	2307K	HA2307	G607	V607,TS607A	FR80X8	1	A607	SNN2607-103	3.7
	SNN507-606	22207K	HA307	G507	V507,TS507A	FR72X11	1	A507	SNN22507-103	2.8
1.1/4	SNN508-607	1208K	HE208	G508E	V508E,TS508E	FR80X10.5	2	A508	SNN1508-104	3.6
	SNN510-608	1308K	HE308	G608E	V608E,TS608E	FR90X9	2	A608	SNN1608-104	4.1
	SNN510-608	2308K	HE2308	G608E	V608E,TS608E	FR90X8	1	A608	SNN2608-104	4.2
	SNN510-608	21308K	HE308	G608E	V608E,TS608E	FR90X9	2	A608	SNN21608-104	4.1
	SNN508-607	22208K	HE308	G508E	V508E,TS508E	FR80X8	2	A508	SNN22508-104	3.7
	SNN510-608	22308K	HE2308	G608E	V608E,TS608E	FR90X8	1	A608	SNN22608-104	4.4
35	SNN508-607	1208K	H208	G508	V508,TS508	FR80X10.5	2	A508	SNN1508-35	3.6
	SNN508-607	2208K	H308	G508	V508,TS508	FR80X8	2	A508	SNN2508-35	3.6
	SNN508-607	22208K	H308	G508	V508,TS508	FR80X8	2	A508	SNN22508-35	3.7
	SNN510-608	1308K	H308	G608	V608,TS608	FR90X9	2	A608	SNN1608-35	4.1
	SNN510-608	21308K	H308	G608	V608,TS608	FR90X9	2	A608	SNN21608-35	4.1
	SNN510-608	2308K	H2308	G608	V608,TS608	FR90X8	1	A608	SNN2608-35	4.2
	SNN510-608	22308K	H2308	G608	V608,TS608	FR90X8	1	A608	SNN22608-35	4.4

<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.

# SNN SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
1.7/16	SNN509	1209K	HA209	G509A	V509A,TS509A	FR85X5.5	2	A509	SNN1509-107	3.7
	SNN511-609	1309K	HA309	G609A	V609A,TS609A	FR100X9.5	2	A609	SNN1609-107	6.1
	SNN511-609	2309K	HA2309	G609A	V609A,TS609A	FR100X8	1	A609	SNN2609-107	6.3
	SNN511-609	21309K	HA309	G609A	V609A,TS609A	FR100X9.5	2	A609	SNN21609-107	6.1
	SNN509	22209K	HA309	G509A	V509A,TS509A	FR85X7	1	A509	SNN22509-107	3.9
	SNN511-609	22309K	HA2309	G609A	V609A,TS609A	FR100X8	1	A609	SNN22609-107	6.5
1.1/2	SNN509	1209K	HE209	G509	V509,TS509E	FR85X5.5	2	A509	SNN1509-108	3.7
	SNN511-609	1309K	HE309	G609	V609,TS609E	FR100X9.5	2	A609	SNN1609-108	6.1
	SNN511-609	2309K	HE2309	G609	V609,TS609E	FR100X8	1	A609	SNN2609-108	6.3
	SNN511-609	21309K	HE309	G609	V609,TS609E	FR100X9.5	2	A609	SNN21609-108	6.1
	SNN509	22209K	HE309	G509	V509,TS509E	FR85X7	1	A509	SNN22509-108	3.9
	SNN511-609	22309K	HE2309	G609	V609,TS609E	FR100X8	1	A609	SNN22609-108	6.5
40	SNN509	1209K	H209	G509	V509,TS509	FR85X5.5	2	A509	SNN1509-40	3.7
	SNN509	2209K	H309	G509	V509,TS509	FR85X7	1	A509	SNN2509-40	3.8
	SNN509	22209K	H309	G509	V509,TS509	FR85X7	1	A509	SNN22509-40	3.9
	SNN511-609	1309K	H309	G609	V609,TS609	FR100X9.5	2	A609	SNN1609-40	6.1
	SNN511-609	21309K	H309	G609	V609,TS609	FR100X9.5	2	A609	SNN21609-40	6.1
	SNN511-609	2309K	H2309	G609	V609,TS609	FR100X8	1	A609	SNN2609-40	6.3
	SNN511-609	22309K	H2309	G609	V609,TS609	FR100X8	1	A609	SNN22609-40	6.5
1.11/16	SNN510-608	1210K	HA210	G510	V510,TS510A	FR90X10.5	2	A510	SNN1510-111	4.0
	SNN512-610	1310K	HA310	G610	V610,TS610A	FR110X10.5	2	A610	SNN1610-111	7.0
	SNN512-610	2310K	HA2310	G610	V610,TS610A	FR110X8	1	A610	SNN2610-111	7.4
	SNN512-610	21310K	HA310	G610	V610,TS610A	FR110X10.5	2	A610	SNN21610-111	7.0
	SNN510-608	22210K	HA310	G510	V510,TS510A	FR90X9	2	A510	SNN22510-111	4.1
	SNN512-610	22310K	HA2310	G610	V610,TS610A	FR110X8	1	A610	SNN22610-111	7.6
1.3/4	SNN510-608	1210K	HE210	G510	V510,TS510E	FR90X10.5	2	A510	SNN1510-112	4.0
	SNN512-610	1310K	HE310	G610	V610,TS610E	FR110X10.5	2	A610	SNN1610-112	7.0
	SNN512-610	2310K	HE2310	G610	V610,TS610E	FR110X8	1	A610	SNN2610-112	7.4
	SNN512-610	21310K	HE310	G610	V610,TS610E	FR110X10.5	2	A610	SNN21610-112	7.0
	SNN510-608	22210K	HE310	G510	V510,TS510E	FR90X9	2	A510	SNN22510-112	4.1
	SNN512-610	22310K	HE2310	G610	V610,TS610E	FR110X8	1	A610	SNN22610-112	7.6
45	SNN510-608	1210K	H210	G510	V510,TS510	FR90X10.5	2	A510	SNN1510-45	4.0
	SNN510-608	2210K	H310	G510	V510,TS510	FR90X9	2	A510	SNN2510-45	4.0
	SNN510-608	22210K	H310	G510	V510,TS510	FR90X9	2	A510	SNN22510-45	4.1
	SNN512-610	1310K	H310	G610	V610,TS610	FR110X10.5	2	A610	SNN1610-45	7.0
	SNN512-610	21310K	H310	G610	V610,TS610	FR110X10.5	2	A610	SNN21610-45	7.0
	SNN512-610	2310K	H2310	G610	V610,TS610	FR110X8	1	A610	SNN2610-45	7.4
	SNN512-610	22310K	H2310	G610	V610,TS610	FR110X8	1	A610	SNN22610-45	7.6
1.15/16	SNN511-609	1211K	HA211	G511	V511,TS511A	FR100X11.5	2	A511	SNN1511-115	5.9
	SNN513-611	1311K	HA311	G611	V611,TS611A	FR120X11	2	A611	SNN1611-115	8.6
	SNN513-611	2311K	HA2311	G611	V611,TS611A	FR120X8	1	A611	SNN2611-115	9.1
	SNN513-611	21311K	HA311	G611	V611,TS611A	FR120X11	2	A611	SNN21611-115	8.6
	SNN511-609	22211K	HA311	G511	V511,TS511A	FR100X9.5	2	A511	SNN22511-115	6.1
	SNN513-611	22311K	HA2311	G611	V611,TS611A	FR120X8	1	A611	SNN22611-115	9.4

<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.



# SNN SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
50	SNN511-609	1211K	H211	G511	V511,TS511	FR100X11.5	2	A511	SNN1511-50	5.9
	SNN511-609	2211K	H311	G511	V511,TS511	FR100X9.5	2	A511	SNN2511-50	6.0
	SNN513-611	1311K	H311	G611	V611,TS611	FR120X11	2	A611	SNN1611-50	8.6
	SNN513-611	2311K	H2311	G611	V611,TS611	FR120X8	1	A611	SNN2611-50	9.1
	SNN513-611	21311K	H311	G611	V611,TS611	FR120X11	2	A611	SNN21611-50	8.6
	SNN511-609	22211K	H311	G511	V511,TS511	FR100X9.5	2	A511	SNN22511-50	6.1
	SNN513-611	22311K	H2311	G611	V611,TS611	FR120X8	1	A611	SNN22611-50	9.4
	2	SNN511-609	1211K	HE211	G511	V511,TS511E	FR100X11.5	2	A511	SNN1511-200
SNN513-611		1311K	HE311	G611	V611,TS611E	FR120X11	2	A611	SNN1611-200	8.6
SNN513-611		2311K	HE2311	G611	V611,TS611E	FR120X8	1	A611	SNN2611-200	9.1
SNN513-611		21311K	HE311	G611	V611,TS611E	FR120X11	2	A611	SNN21611-200	8.6
SNN511-609		22211K	HE311	G511	V511,TS511E	FR100X9.5	2	A511	SNN22511-200	6.1
SNN513-611		22311K	HE2311	G611	V611,TS611E	FR120X8	1	A611	SNN22611-200	9.4
55	SNN512-610	1212K	H212	G512	V512,TS512	FR110X13	2	A512	SNN1512-55	6.8
	SNN512-610	2212K	H312	G512	V512,TS512	FR110X10	2	A512	SNN2512-55	6.9
	SNN515-612	1312K	H312	G612	V612,TS612	FR130X12.5	2	A612	SNN1612-55	9.4
	SNN515-612	2312K	H2312	G612	V612,TS612	FR130X10	1	A612	SNN2612-55	9.9
	SNN515-612	21312K	H312	G612	V612,TS612	FR130X12.5	2	A612	SNN21612-55	9.4
	SNN512-610	22212K	H312	G512	V512,TS512	FR110X10	2	A512	SNN22512-55	7.1
	SNN515-612	22312K	H2312	G612	V612,TS612	FR130X10	1	A612	SNN22612-55	10.3
	2.3/16	SNN513-611	1213K	HA213	G513A	V513A,TS513A	FR120X14	2	A513	SNN1513-203
SNN516-613		1313K	HA313	G613A	V613A,TS613A	FR140X12.5	2	A613	SNN1613-203	13.4
SNN516-613		2313K	HA2313	G613A	V613A,TS613A	FR140X10	1	A613	SNN2613-203	14.0
SNN516-613		21313K	HA313	G613A	V613A,TS613A	FR140X12.5	2	A613	SNN21613-203	13.3
SNN513-611		22213K	HA313	G513A	V513A,TS513A	FR120X10	2	A513	SNN22513-203	8.7
SNN516-613		22313K	HA2313	G613A	V613A,TS613A	FR140X10	1	A613	SNN22613-203	14.4
2.1/4	SNN513-611	1213K	HE213	G513	V513,TS513E	FR120X14	2	A513	SNN1513-204	8.3
	SNN516-613	1313K	HE313	G613	V613,TS613E	FR140X12.5	2	A613	SNN1613-204	13.4
	SNN516-613	2313K	HE2313	G613	V613,TS613E	FR140X10	1	A613	SNN2613-204	14.0
	SNN516-613	21313K	HE313	G613	V613,TS613E	FR140X12.5	2	A613	SNN21613-204	13.3
	SNN513-611	22213K	HE313	G513	V513,TS513E	FR120X10	2	A513	SNN22513-204	8.7
	SNN516-613	22313K	HE2313	G613	V613,TS613E	FR140X10	1	A613	SNN22613-204	14.4
60	SNN513-611	1213K	H213	G513	V513,TS513	FR120X14	2	A513	SNN1513-60	8.3
	SNN513-611	2213K	H313	G513	V513,TS513	FR120X10	2	A513	SNN2513-60	8.6
	SNN516-613	1313K	H313	G613	V613,TS613	FR140X12.5	2	A613	SNN1613-60	13.4
	SNN516-613	2313K	H2313	G613	V613,TS613	FR140X10	1	A613	SNN2613-60	14.0
	SNN516-613	21313K	H313	G613	V613,TS613	FR140X12.5	2	A613	SNN21613-60	13.3
	SNN513-611	22213K	H313	G513	V513,TS513	FR120X10	2	A513	SNN22513-60	8.7
	SNN516-613	22313K	H2313	G613	V613,TS613	FR140X10	1	A613	SNN22613-60	14.4
	2.7/16	SNN515-612	1215K	HA215	G515	V515,TS515A	FR130X15.5	2	A515	SNN1515-207
SNN518-615		1315K	HA315	G615	V615,TS615A	FR160X14	2	A615	SNN1615-207	17.5
SNN518-615		2315K	HA2315	G615	V615,TS615A	FR160X10	1	A615	SNN2615-207	18.9
SNN518-615		21315K	HA315	G615	V615,TS615A	FR160X14	2	A615	SNN21615-207	17.5
SNN515-612		22215K	HA315	G515	V515,TS515A	FR130X12.5	2	A515	SNN22515-207	9.5
SNN518-615		22315K	HA2315	G615	V615,TS615A	FR160X10	1	A615	SNN22615-207	19.4

<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.



# SNN SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
2.1/2	SNN515-612	1215K	HE215	G515	V515,TS515E	FR130X15.5	2	A515	SNN1515-208	9.1
	SNN518-615	1315K	HE315	G615	V615,TS615E	FR160X14	2	A615	SNN1615-208	17.5
	SNN518-615	2315K	HE2315	G615	V615,TS615E	FR160X10	1	A615	SNN2615-208	18.9
	SNN518-615	21315K	HE315	G615	V615,TS615E	FR160X14	2	A615	SNN21615-208	17.5
	SNN515-612	22215K	HE315	G515	V515,TS515E	FR130X12.5	2	A515	SNN22515-208	9.5
	SNN518-615	22315K	HE2315	G615	V615,TS615E	FR160X10	1	A615	SNN22615-208	19.4
65	SNN515-612	1215K	H215	G515	V515,TS515	FR130X15.5	2	A515	SNN1515-65	9.1
	SNN515-612	2215K	H315	G515	V515,TS515	FR130X12.5	2	A515	SNN2515-65	9.4
	SNN518-615	1315K	H315	G615	V615,TS615	FR160X14	2	A615	SNN1615-65	17.5
	SNN518-615	2315K	H2315	G615	V615,TS615	FR160X10	1	A615	SNN2615-65	18.9
	SNN518-615	21315K	H315	G615	V615,TS615	FR160X14	2	A615	SNN21615-65	17.5
	SNN515-612	22215K	H315	G515	V515,TS515	FR130X12.5	2	A515	SNN22515-65	9.5
SNN518-615	22315K	H2315	G615	V615,TS615	FR160X10	1	A615	SNN22615-65	19.4	
2.11/16	SNN516-613	1216K	HA216	G516	V516,TS516A	FR140X16	2	A516	SNN1516-211	13.0
	SNN519-616	1316K	HA316	G616	V616,TS616A	FR170X14.5	2	A616	SNN1616-211	19.9
	SNN519-616	2316K	HA2316	G616	V616,TS616A	FR170X10	1	A616	SNN2616-211	21.5
	SNN519-616	21316K	HA316	G616	V616,TS616A	FR170X14.5	2	A616	SNN21616-211	20.0
	SNN516-613	22216K	HA316	G516	V516,TS516A	FR140X12.5	2	A516	SNN22516-211	13.4
	SNN519-616	22316K	HA2316	G616	V616,TS616A	FR170X10	1	A616	SNN22616-211	22.3
2.3/4	SNN516-613	1216K	HE216	G516	V516,TS516E	FR140X16	2	A516	SNN1516-212	13.0
	SNN519-616	1316K	HE316	G616	V616,TS616E	FR170X14.5	2	A616	SNN1616-212	19.9
	SNN519-616	2316K	HE2316	G616	V616,TS616E	FR170X10	1	A616	SNN2616-212	21.5
	SNN519-616	21316K	HE316	G616	V616,TS616E	FR170X14.5	2	A616	SNN21616-212	20.0
	SNN516-613	22216K	HE316	G516	V516,TS516E	FR140X12.5	2	A516	SNN22516-212	13.4
	SNN519-616	22316K	HE2316	G616	V616,TS616E	FR170X10	1	A616	SNN22616-212	22.3
70	SNN516-613	1216K	H216	G516	V516,TS516	FR140X16	2	A516	SNN1516-70	13.0
	SNN516-613	2216K	H316	G516	V516,TS516	FR140X12.5	2	A516	SNN2516-70	13.3
	SNN519-616	1316K	H316	G616	V616,TS616	FR170X14.5	2	A616	SNN1616-70	19.9
	SNN519-616	2316K	H2316	G616	V616,TS616	FR170X10	1	A616	SNN2616-70	21.5
	SNN519-616	21316K	H316	G616	V616,TS616	FR170X14.5	2	A616	SNN21616-70	20.0
	SNN516-613	22216K	H316	G516	V516,TS516	FR140X12.5	2	A516	SNN22516-70	13.4
SNN519-616	22316K	H2316	G616	V616,TS616	FR170X10	1	A616	SNN22616-70	22.3	
2.15/16	SNN517	1217K	HA217	G517	V517,TS517A	FR150X16.5	2	A517	SNN1517-215	14.5
	SNN520-617	1317K	HA317	G617	V617,TS617A	FR180X14.5	2	A617	SNN1617-215	24.8
	SNN520-617	2317K	HA2317	G617	V617,TS617A	FR180X10	1	A617	SNN2617-215	26.4
	SNN520-617	21317K	HA317	G617	V617,TS617A	FR180X14.5	2	A617	SNN21617-215	24.8
	SNN517	22217K	HA317	G517	V517,TS517A	FR150X12.5	2	A517	SNN22517-215	15.2
	SNN520-617	22317K	HA2317	G617	V617,TS617A	FR180X10	1	A617	SNN22617-215	27.2
75	SNN517	1217K	H217	G517	V517,TS517	FR150X16.5	2	A517	SNN1517-75	14.5
	SNN517	2217K	H317	G517	V517,TS517	FR150X12.5	2	A517	SNN2517-75	15.0
	SNN520-617	1317K	H317	G617	V617,TS617	FR180X14.5	2	A617	SNN1617-75	24.8
	SNN520-617	2317K	H2317	G617	V617,TS617	FR180X10	1	A617	SNN2617-75	26.4
	SNN520-617	21317K	H317	G617	V617,TS617	FR180X14.5	2	A617	SNN21617-75	24.8
	SNN517	22217K	H317	G517	V517,TS517	FR150X12.5	2	A517	SNN22517-75	15.2
SNN520-617	22317K	H2317	G617	V617,TS617	FR180X10	1	A617	SNN22617-75	27.2	

<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.

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Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
3	SNN517	1217K	HE217	G517	V517E,TS517E	FR150X16.5	2	A517	SNN1517-300	14.5
	SNN520-617	1317K	HE317	G617	V617E,TS617E	FR180X14.5	2	A617	SNN1617-300	24.8
	SNN520-617	2317K	HE2317	G617	V617E,TS617E	FR180X10	1	A617	SNN2617-300	26.4
	SNN520-617	21317K	HE317	G617	V617E,TS617E	FR180X14.5	2	A617	SNN21617-300	24.8
	SNN517	22217K	HE317	G517	V517E,TS517E	FR150X12.5	2	A517	SNN22517-300	15.2
	SNN520-617	22317K	HE2317	G617	V617E,TS617E	FR180X10	1	A617	SNN22617-300	27.2
80	SNN518-615	1218K	H218	G518	V518,TS518	FR160X17.5	2	A518	SNN1518-80	17.0
	SNN518-615	22218K	H318	G518	V518,TS518	FR160X12.5	2	A518	SNN22518-80	18.0
	SNN518-615	23218K	H2318	G518	V518,TS518	FR160X12.5	1	A518	SNN23518-80	19.3
3.3/16	SNN518-615	1218K	HA218	G518	V518,TS518A	FR160X17.5	2	A518	SNN1518-303	17.0
	SNN518-615	22218K	HA318	G518	V518,TS518A	FR160X12.5	2	A518	SNN22518-303	18.0
	SNN518-615	23218K	HA2318	G518	V518,TS518A	FR160X12.5	1	A518	SNN23518-303	19.3
3.1/4	SNN518-615	1218K	HE218	G518	V518E,TS518E	FR160X17.5	2	A518	SNN1518-304	17.0
	SNN518-615	22218K	HE318	G518	V518E,TS518E	FR160X12.5	2	A518	SNN22518-304	18.0
	SNN518-615	23218K	HE2318	G518	V518E,TS518E	FR160X12.5	1	A518	SNN23518-304	19.3
85	SNN519-616	1219K	H219	G519	V519,TS519	FR170X18	2	A519	SNN1519-85	19.2
	SNN519-616	2219K	H319	G519	V519,TS519	FR170X12.5	2	A519	SNN2519-85	20.2
	SNN519-616	22219K	H319	G519	V519,TS519	FR170X12.5	2	A519	SNN22519-85	20.5
	SNN522-619	22319K	H2319	G619	V619,TS619	FR200X13	1	A619	SNN22619-85	36.3
3.7/16	SNN520-617	1220K	HA220	G520	V520,TS520A	FR180X18	2	A520	SNN1520-307	23.7
	SNN524-620	1320K	HA320	G620	V620,TS620A	FR215X13	3	A620	SNN1620-307	36.5
	SNN524-620	21320K	HA320	G620	V620,TS620A	FR215X13	3	A620	SNN21620-307	37.4
	SNN520-617	22220K	HA320	G520	V520,TS520A	FR180X12	2	A520	SNN22520-307	25.3
	SNN524-620	22320K	HA2320	G620	V620,TS620A	FR215X13	1	A620	SNN22620-307	41.1
	SNN520-617	23220K	HA2320	G520	V520,TS520A	FR180X9.5	1	A520	SNN23520-307	27.2
3.1/2	SNN520-617	1220K	HE220	G520	V520,TS520E	FR180X18	2	A520	SNN1520-308	23.7
	SNN524-620	1320K	HE320	G620	V620,TS620E	FR215X13	3	A620	SNN1620-308	36.5
	SNN524-620	21320K	HE320	G620	V620,TS620E	FR215X13	3	A620	SNN21620-308	37.4
	SNN520-617	22220K	HE320	G520	V520,TS520E	FR180X12	2	A520	SNN22520-308	25.3
	SNN524-620	22320K	HE2320	G620	V620,TS620E	FR215X13	1	A620	SNN22620-308	41.4
	SNN520-617	23220K	HE2320	G520	V520,TS520E	FR180X9.5	1	A520	SNN23520-308	27.2
90	SNN520-617	1220K	H220	G520	V520,TS520	FR180X18	2	A520	SNN1520-90	23.7
	SNN520-617	22220K	H320	G520	V520,TS520	FR180X12	2	A520	SNN22520-90	25.3
	SNN524-620	22320K	H2320	G620	V620,TS620	FR215X13	1	A620	SNN22620-90	41.1
	SNN520-617	23220K	H2320	G520	V520,TS520	FR180X9.5	1	A520	SNN23520-90	27.2
100	SNN522-619	1222K	H222	G522	V522,TS522	FR200X21	2	A522	SNN1522-100	31.4
	SNN522-619	22222K	H322	G522	V522,TS522	FR200X13.5	2	A522	SNN22522-100	33.9
	SNN522-619	23222K	H2322	G522	V522,TS522	FR200X10	1	A522	SNN23522-100	36.5
3.15/16	SNN522-619	1222K	H222	G522	V522,TS522A	FR200X21	2	A522	SNN1522-315	31.4
	SNN522-619	22222K	H322	G522	V522,TS522A	FR200X13.5	2	A522	SNN22522-315	33.9
	SNN522-619	23222K	H2322	G522	V522,TS522A	FR200X10	1	A522	SNN23522-315	36.5

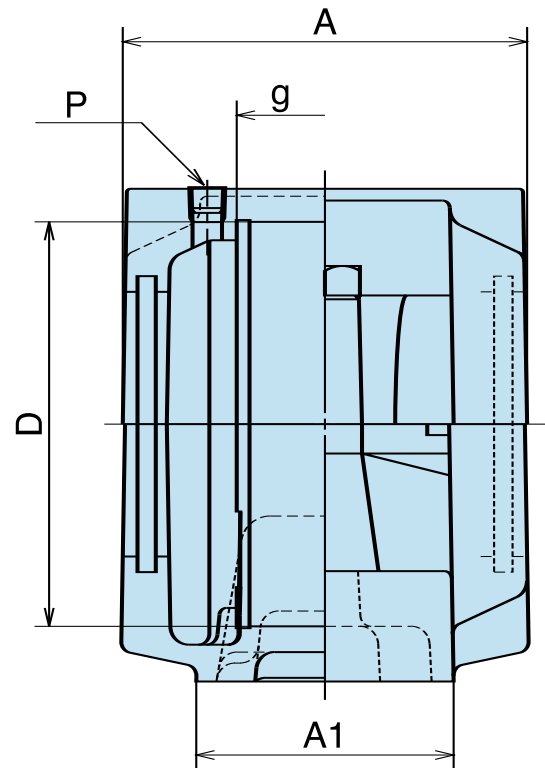
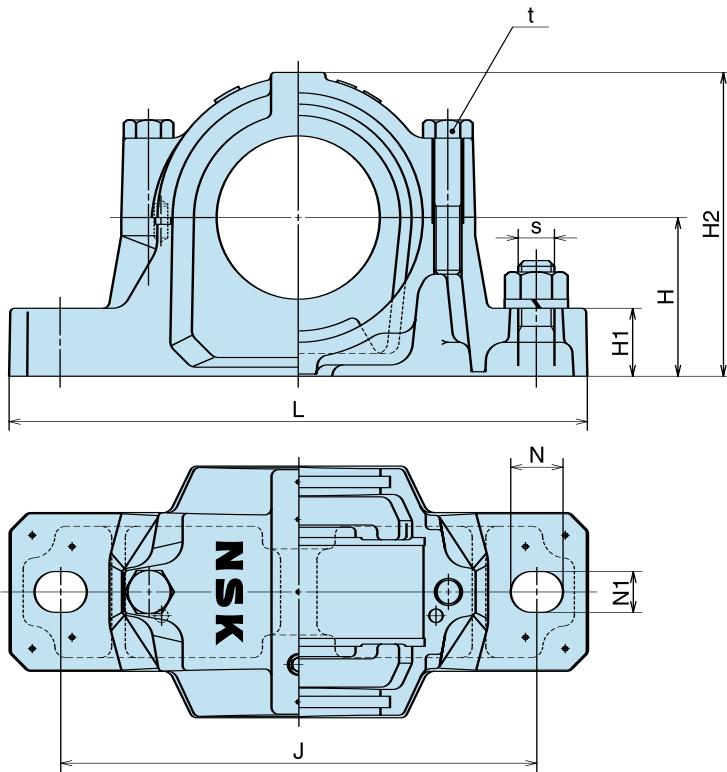
<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.

# SNN SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Designation	Qty	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)
4	SNN522-619	1222K	HE222	G522	V522,TS522E	FR200X21	2	A522	SNN1522-400	31.4
	SNN522-619	22222K	HE322	G522	V522,TS522E	FR200X13.5	2	A522	SNN22522-400	33.9
	SNN522-619	23222K	HE2322	G522	V522,TS522E	FR200X10	1	A522	SNN23522-400	36.5
4.3/16	SNN524-620	22224K	HA3124	G524	V524,TS524A	FR215X14	2	A524	SNN22524-403	38.1
	SNN524-620	23224K	HA2324	G524	V524,TS525A	FR215X10	1	A524	SNN23524-403	41.7
4.1/4	SNN524-620	22224K	HE3124	G524	V524,TS524E	FR215X14	2	A524	SNN22524-404	38.1
	SNN524-620	23224K	HE2324	G524	V524,TS524E	FR215X10	1	A524	SNN23524-404	41.7
110	SNN524-620	22224K	H3124	G524	V524,TS524	FR215X14	2	A524	SNN22524-110	38.1
	SNN524-620	23224K	H2324	G524	V524,TS524	FR215X10	1	A524	SNN23524-110	41.7
4.7/16	SNN526	22226K	HA3126	G526	V526,TS526A	FR230X13	2	A526	SNN22526-407	48.3
	SNN526	23226K	HA2326	G526	V526,TS526A	FR230X10	1	A526	SNN23526-407	52.1
4.1/2	SNN526	22226K	HE3126	G526	V526,TS526E	FR230X13	2	A526	SNN22526-408	48.3
	SNN526	23226K	HE2326	G526	V526,TS526E	FR230X10	1	A526	SNN23526-408	52.1
115	SNN526	22226K	H3126	G526	V526,TS526	FR230X13	2	A526	SNN22526-115	48.3
	SNN526	23226K	H2326	G526	V526,TS526	FR230X10	1	A526	SNN23526-115	52.1
125	SNN528	22228K	H3128	G528	V528,TS528	FR250X15	2	A528	SNN22528-125	59.3
	SNN528	23228K	H2328	G528	V528,TS528	FR250X10	1	A528	SNN23528-125	64.6
4.15/16	SNN528	22228K	HA3128	G528	V528,TS528A	FR250X15	2	A528	SNN22528-415	59.3
	SNN528	23228K	HA2328	G528	V528,TS528A	FR250X10	1	A528	SNN23528-415	64.6
5	SNN528	22228K	HE3128	G528	V528E,TS528E	FR250X15	2	A528	SNN22528-500	59.3
	SNN528	23228K	HE2328	G528	V528E,TS528E	FR250X10	1	A528	SNN23528-500	64.6
5.3/16	SNN530	22230K	HA3130	G530	V530,TS530A	FR270X16.5	2	A530	SNN22530-503	73.4
	SNN530	23230K	HA2330	G530	V530,TS530A	FR270X10	1	A530	SNN23530-503	80.1
5.1/4	SNN530	22230K	HE3130	G530	V530,TS530E	FR270X16.5	2	A530	SNN22530-504	73.4
	SNN530	23230K	HE2330	G530	V530,TS530E	FR270X10	1	A530	SNN23530-504	80.1
135	SNN530	22230K	H3130	G530	V530,TS530	FR270X16.5	2	A530	SNN22530-135	73.4
	SNN530	23230K	H2330	G530	V530,TS530	FR270X10	1	A530	SNN23530-135	80.1
5.7/16	SNN532	22232K	HA3132	G532	V532,TS532A	FR290X17	2	A532	SNN22532-507	86.3
	SNN532	23232K	HA2332	G532	V532,TS532A	FR290X10	1	A532	SNN23532-507	95.0
5.1/2	SNN532	22232K	HE3132	G532	V532,TS532E	FR290X17	2	A532	SNN22532-508	86.3
	SNN532	23232K	HE2332	G532	V532,TS532E	FR290X10	1	A532	SNN23532-508	95.0
140	SNN532	22232K	H3132	G532	V532,TS532	FR290X17	2	A532	SNN22532-140	86.3
	SNN532	23232K	H2332	G532	V532,TS532	FR290X10	1	A532	SNN23532-140	95.0

<sup>(1)</sup> For housing dimensions see page 16. <sup>(2)</sup> For information on how to order a complete assembly, see page 2.

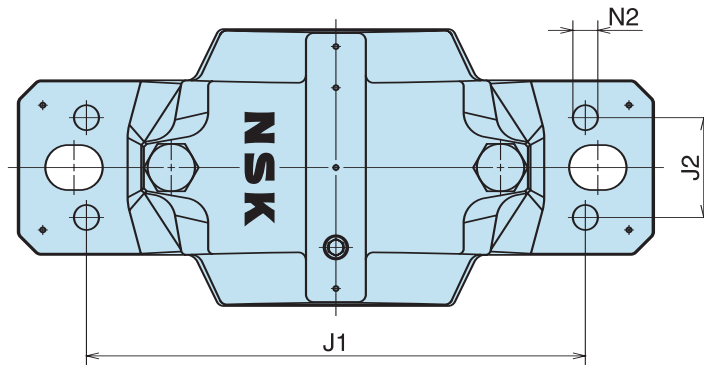
# SNN SPLIT PILLOW BLOCK HOUSING DIMENSIONS



Housing No.	D	H	J	A	L	A1	H1	H2	g	t	ft-lbf <sup>(1)</sup>	N	N1	S		P	Mass kg
														Metric	Inch		
SNN505	52	40	130	70	165	46	22	73	25	M10	32.4	20	15	M12	1/2	R 1/8	2.0
SNN506-605	62	50	150	80	185	52	22	88	32	M10	32.4	20	15	M12	1/2	R 1/8	2.0
SNN507-606	72	50	150	85	185	52	22	93	34	M10	32.4	20	15	M12	1/2	R 1/8	2.2
SNN508-607	80	60	170	90	205	60	25	107	39	M10	32.4	20	15	M12	1/2	R 1/8	2.9
SNN509	85	60	170	90	205	60	25	111	30	M10	32.4	20	15	M12	1/2	R 1/8	3.0
SNN510-608	90	60	170	95	205	60	25	113	41	M10	32.4	20	15	M12	1/2	R 1/8	3.1
SNN511-609	100	70	210	100	255	70	28	129	44	M12	56.1	24	18	M16	5/8	R 1/8	4.8
SNN512-610	110	70	210	110	255	70	30	134	48	M12	56.1	24	18	M16	5/8	R 1/8	5.4
SNN513-611	120	80	230	115	275	80	30	150	51	M12	56.1	24	18	M16	5/8	R 1/8	6.6
SNN515-612	130	80	230	120	280	80	30	155	56	M12	56.1	24	18	M16	5/8	R 1/8	6.8
SNN516-613	140	95	260	130	315	90	32	175	58	M16	140.2	28	22	M20	3/4	R 1/4	10.2
SNN517	150	95	260	135	320	90	32	183	61	M16	140.2	28	22	M20	3/4	R 1/4	11.2
SNN518-615	160	100	290	145	345	100	35	193	65	M16	140.2	28	22	M20	3/4	R 1/4	13.0
SNN519-616	170	112	290	145	345	100	35	210	68	M16	140.2	28	22	M20	3/4	R 1/4	14.5
SNN520-617	180	112	320	160	380	110	40	215	70	M20	272.9	32	26	M24	1	R 1/4	18.3
SNN522-619	200	125	350	175	410	120	45	240	80	M20	272.9	32	26	M24	1	R 1/4	24.0
SNN524-620	215	140	350	185	410	120	45	271	86	M20	272.9	32	26	M24	1	R 3/8	26.2
SNN526	230	150	380	190	445	130	50	288	90	M24	472.0	35	28	M24	1	R 3/8	33.0
SNN528	250	150	420	205	500	150	50	298	98	M24	472.0	42	35	M30	1.1/4	R 3/8	40.0
SNN530	270	160	450	220	530	160	60	322	106	M24	472.0	42	35	M30	1.1/4	R 3/8	49.0
SNN532	290	170	470	235	550	160	60	342	114	M24	472.0	42	35	M30	1.1/4	R 3/8	55.0

<sup>(1)</sup> Recommended tightening torque for cap bolts in foot pounds (ft-lbf).

# SNN SPLIT PILLOW BLOCK HOUSINGS



## Recommended dimensions for 4-Bolt mounting (mm)

Housing No.	J1	J2	N2	Bolt Size
SNN508-607	160	34	11	M10
SNN509	160	34	11	M10
SNN510-608	160	34	11	M10
SNN511-609	200	40	14	M12
SNN512-610	200	40	14	M12
SNN513-611	210	48	14	M12
SNN515-612	220	48	14	M12
SNN516-613	244	52	18	M16
SNN517	254	52	18	M16
SNN518-615	275	58	18	M16
SNN519-616	275	58	18	M16
SNN520-617	300	66	18	M16
SNN522-619	320	74	18	M16
SNN524-620	320	74	18	M16
SNN526	355	84	22	M20
SNN528	400	92	26	M24
SNN530	430	100	26	M24
SNN532	450	100	26	M24

# SAFD SPLIT PILLOW BLOCK HOUSINGS

Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Qty Designation	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)	
1.7/16	SAFD509	1209K	HA209	LER17	TER17	FR85X10	1	EPR3	SAFD1509-107	5.2
	SAFD509	2209K	HA309	LER17	TER17	FR85X6	1	EPR3	SAFD2509-107	5.3
	<b>SAFD509</b>	<b>22209K</b>	<b>HA309</b>	<b>LER17</b>	<b>TER17</b>	<b>FR85X6</b>	<b>1</b>	<b>EPR3</b>	<b>SAFD22509-107</b>	<b>5.3</b>
1.1/2	SAFD509	1209K	HE209	LER18	TER18	FR85X10	1	EPR3	SAFD1509-108	5.2
	SAFD509	2209K	HE309	LER18	TER18	FR85X6	1	EPR3	SAFD2509-108	5.3
	<b>SAFD509</b>	<b>22209K</b>	<b>HE309</b>	<b>LER18</b>	<b>TER18</b>	<b>FR85X6</b>	<b>1</b>	<b>EPR3</b>	<b>SAFD22509-108</b>	<b>5.3</b>
1.11/16	SAFD510	1210K	HA210	LER20	TER20	FR90X10	1	EPR4	SAFD1510-111	5.8
	SAFD510	2210K	HA310	LER20	TER20	FR90X7	1	EPR4	SAFD2510-111	5.9
	<b>SAFD510</b>	<b>22210K</b>	<b>HA310</b>	<b>LER20</b>	<b>TER20</b>	<b>FR90X7</b>	<b>1</b>	<b>EPR4</b>	<b>SAFD22510-111</b>	<b>5.9</b>
1.3/4	SAFD510	1210K	HE210	LER21	TER21	FR90X10	1	EPR4	SAFD1510-112	5.8
	SAFD510	2210K	HE310	LER21	TER21	FR90X7	1	EPR4	SAFD2510-112	5.9
	SAFD510	22210K	HE310	LER21	TER21	FR90X7	1	EPR4	SAFD22510-112	5.9
1.15/16	SAFD511	1211K	HA211	LER24	TER24	FR100X10	1	EPR5	SAFD1511-115	7.5
	SAFD511	2211K	HA311	LER24	TER24	FR100X6	1	EPR5	SAFD2511-115	7.6
	<b>SAFD511</b>	<b>22211K</b>	<b>HA311</b>	<b>LER24</b>	<b>TER24</b>	<b>FR100X6</b>	<b>1</b>	<b>EPR5</b>	<b>SAFD22511-115</b>	<b>7.6</b>
2	SAFD511	1211K	HE211	LER25	TER25	FR100X10	1	EPR5	SAFD1511-200	7.5
	SAFD511	2211K	HE311	LER25	TER25	FR100X6	1	EPR5	SAFD2511-200	7.5
	SAFD511	22211K	HE311	LER25	TER25	FR100X6	1	EPR5	SAFD22511-200	7.6
2.3/16	SAFD513	1213K	HA213	LER29	TER29	FR120X8	2	EPR6	SAFD1513-203	10.0
	FSAFD513	1213K	HA213	LER29	TER29	FR120X8	2	EPR6	FSAFD1513-203	10.0
	SAFD513	2213K	HA313	LER29	TER29	FR120X8	1	EPR6	SAFD2513-203	10.5
	FSAFD513	2213K	HA313	LER29	TER29	FR120X8	1	EPR6	FSAFD2513-203	10.5
	<b>SAFD513</b>	<b>22213K</b>	<b>HA313</b>	<b>LER29</b>	<b>TER29</b>	<b>FR120X8</b>	<b>1</b>	<b>EPR6</b>	<b>SAFD22513-203</b>	<b>10.5</b>
	<b>FSAFD513</b>	<b>22213K</b>	<b>HA313</b>	<b>LER29</b>	<b>TER29</b>	<b>FR120X8</b>	<b>1</b>	<b>EPR6</b>	<b>FSAFD22513-203</b>	<b>10.5</b>
2.1/4	SAFD513	1213K	HE213	LER30	TER30	FR120X8	2	EPR6	SAFD1513-204	10.0
	FSAFD513	1213K	HE213	LER30	TER30	FR120X8	2	EPR6	FSAFD1513-204	10.0
	SAFD513	2213K	HE313	LER30	TER30	FR120X8	1	EPR6	SAFD2513-204	10.5
	FSAFD513	2213K	HE313	LER30	TER30	FR120X8	1	EPR6	FSAFD2513-204	10.5
	SAFD513	22213K	HE313	LER30	TER30	FR120X8	1	EPR6	SAFD22513-204	10.5
	FSAFD513	22213K	HE313	LER30	TER30	FR120X8	1	EPR6	FSAFD22513-204	10.5
2.7/16	SAFD515	1215K	HA215	LER37	TER37	FR130X6	2	EPR7	SAFD1515-207	12.5
	FSAFD515	1215K	HA215	LER37	TER37	FR130X6	2	EPR7	FSAFD1515-207	12.5
	SAFD515	2215K	HA315	LER37	TER37	FR130X6	1	EPR7	SAFD2515-207	12.8
	FSAFD515	2215K	HA315	LER37	TER37	FR130X6	1	EPR7	FSAFD2515-207	12.8
	<b>SAFD515</b>	<b>22215K</b>	<b>HA315</b>	<b>LER37</b>	<b>TER37</b>	<b>FR130X6</b>	<b>1</b>	<b>EPR7</b>	<b>SAFD22515-207</b>	<b>12.9</b>
	<b>FSAFD515</b>	<b>22215K</b>	<b>HA315</b>	<b>LER37</b>	<b>TER37</b>	<b>FR130X6</b>	<b>1</b>	<b>EPR7</b>	<b>FSAFD22515-207</b>	<b>12.9</b>
2.1/2	SAFD515	1215K	HE215	LER38	TER38	FR130X6	2	EPR7	SAFD1515-208	12.5
	FSAFD515	1215K	HE215	LER38	TER38	FR130X6	2	EPR7	FSAFD1515-208	12.5
	SAFD515	2215K	HE315	LER38	TER38	FR130X6	1	EPR7	SAFD2515-208	12.8
	FSAFD515	2215K	HE315	LER38	TER38	FR130X6	1	EPR7	FSAFD2515-208	12.8
	SAFD515	22215K	HE315	LER38	TER38	FR130X6	1	EPR7	SAFD22515-208	12.9
	FSAFD515	22215K	HE315	LER38	TER38	FR130X6	1	EPR7	FSAFD22515-208	12.9
2.11/16	SAFD516	1216K	HA216	LER44	TER44	FR140X8.5	2	EPR8	SAFD1516-211	14.7
	FSAFD516	1216K	HA216	LER44	TER44	FR140X8.5	2	EPR8	FSAFD1516-211	14.7
	SAFD516	2216K	HA316	LER44	TER44	FR140X10	1	EPR8	SAFD2516-211	15.2
	FSAFD516	2216K	HA316	LER44	TER44	FR140X10	1	EPR8	FSAFD2516-211	15.2
	<b>SAFD516</b>	<b>22216K</b>	<b>HA316</b>	<b>LER44</b>	<b>TER44</b>	<b>FR140X10</b>	<b>1</b>	<b>EPR8</b>	<b>SAFD22516-211</b>	<b>15.2</b>
	<b>FSAFD516</b>	<b>22216K</b>	<b>HA316</b>	<b>LER44</b>	<b>TER44</b>	<b>FR140X10</b>	<b>1</b>	<b>EPR8</b>	<b>FSAFD22516-211</b>	<b>15.2</b>
2.3/4	SAFD516	1216K	HE216	LER45	TER45	FR140X8.5	2	EPR8	SAFD1516-212	14.7
	FSAFD516	1216K	HE216	LER45	TER45	FR140X8.5	2	EPR8	FSAFD1516-212	14.7
	SAFD516	2216K	HE316	LER45	TER45	FR140X10	1	EPR8	SAFD2516-212	15.2
	FSAFD516	2216K	HE316	LER45	TER45	FR140X10	1	EPR8	FSAFD2516-212	15.2
	SAFD516	22216K	HE316	LER45	TER45	FR140X10	1	EPR8	SAFD22516-212	15.3
	FSAFD516	22216K	HE316	LER45	TER45	FR140X10	1	EPR8	FSAFD22516-212	15.3

<sup>(1)</sup> For housing dimensions see page 20. <sup>(2)</sup> Bolded items denote common shaft sizes and include the LER seal rings and FR fixing ring. All other sizes will incur separate charges for these items. Please refer to page 3 for complete assembly details.  
For oil lubrication, please consult NSK Engineering.



# SAFD SPLIT PILLOW BLOCK HOUSINGS

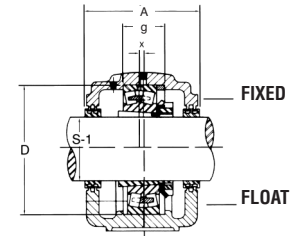
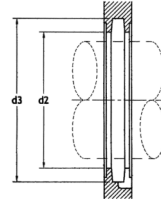
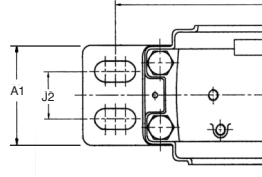
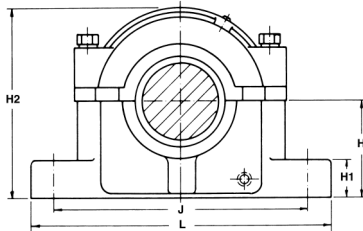
Shaft Dia.	Housing <sup>(1)</sup>	Bearing	Adapter Sleeve	Standard Seal	Optional Seal	Fixing Rings Qty Designation	End Cover	Assembly <sup>(2)</sup>	Complete Weight (kg)	
2.15/16	SAFD517	1217K	HA217	LER53	TER53	FR150X9	2	EPR9	SAFD1517-215	18.0
	FSAFD517	1217K	HA217	LER53	TER53	FR150X9	2	EPR9	FSAFD1517-215	18.0
	SAFD517	2217K	HA317	LER53	TER53	FR150X10	1	EPR9	SAFD2517-215	18.6
	FSAFD517	2217K	HA317	LER53	TER53	FR150X10	1	EPR9	FSAFD2517-215	18.6
	<b>SAFD517</b>	<b>22217K</b>	<b>HA317</b>	<b>LER53</b>	<b>TER53</b>	<b>FR150X10</b>	<b>1</b>	<b>EPR9</b>	<b>SAFD22517-215</b>	<b>18.7</b>
	<b>FSAFD517</b>	<b>22217K</b>	<b>HA317</b>	<b>LER53</b>	<b>TER53</b>	<b>FR150X10</b>	<b>1</b>	<b>EPR9</b>	<b>FSAFD22517-215</b>	<b>18.7</b>
3	SAFD517	1217K	HE217	LER54	TER54	FR150X9	2	EPR9	SAFD1517-300	18.0
	FSAFD517	1217K	HE217	LER54	TER54	FR150X9	2	EPR9	FSAFD1517-300	18.0
	SAFD517	2217K	HE317	LER54	TER54	FR150X10	1	EPR9	SAFD2517-300	18.6
	FSAFD517	2217K	HE317	LER54	TER54	FR150X10	1	EPR9	FSAFD2517-300	18.6
	SAFD517	22217K	HE317	LER54	TER54	FR150X10	1	EPR9	SAFD22517-300	18.7
	FSAFD517	22217K	HE317	LER54	TER54	FR150X10	1	EPR9	FSAFD22517-300	18.7
3.3/16	SAFD518	1218K	HA218	LER188	TER188	FR160X10	2	EPR11	SAFD1518-303	22.0
	FSAFD518	1218K	HA218	LER188	TER188	FR160X10	2	EPR11	FSAFD1518-303	22.0
	SAFD518	2218K	HA318	LER188	TER188	FR160X10	1	EPR11	SAFD2518-303	23.0
	FSAFD518	2218K	HA318	LER188	TER188	FR160X10	1	EPR11	FSAFD2518-303	23.0
	<b>SAFD518</b>	<b>22218K</b>	<b>HA318</b>	<b>LER188</b>	<b>TER188</b>	<b>FR160X10</b>	<b>1</b>	<b>EPR11</b>	<b>SAFD22518-303</b>	<b>23.0</b>
	<b>FSAFD518</b>	<b>22218K</b>	<b>HA318</b>	<b>LER188</b>	<b>TER188</b>	<b>FR160X10</b>	<b>1</b>	<b>EPR11</b>	<b>FSAFD22518-303</b>	<b>23.0</b>
3.1/4	SAFD518	1218K	HE218	LER189	TER189	FR160X10	2	EPR11	SAFD1518-304	22.0
	FSAFD518	1218K	HE218	LER189	TER189	FR160X10	2	EPR11	FSAFD1518-304	22.0
	SAFD518	2218K	HE318	LER189	TER189	FR160X10	1	EPR11	SAFD2518-304	23.0
	FSAFD518	2218K	HE318	LER189	TER189	FR160X10	1	EPR11	FSAFD2518-304	23.0
	SAFD518	22218K	HE318	LER189	TER189	FR160X10	1	EPR11	SAFD22518-304	23.0
	FSAFD518	22218K	HE318	LER189	TER189	FR160X10	1	EPR11	FSAFD22518-304	23.0
3.7/16	SAFD520	1220K	HA220	LER102	TER102	FR180X11	2	EPR12	SAFD1520-307	27.8
	FSAFD520	1220K	HA220	LER102	TER102	FR180X11	2	EPR12	FSAFD1520-307	27.8
	SAFD520	2220K	HA320	LER102	TER102	FR180X10	1	EPR12	SAFD2520-307	29.3
	FSAFD520	2220K	HA320	LER102	TER102	FR180X10	1	EPR12	FSAFD2520-307	29.3
	<b>SAFD520</b>	<b>22220K</b>	<b>HA320</b>	<b>LER102</b>	<b>TER102</b>	<b>FR180X10</b>	<b>1</b>	<b>EPR12</b>	<b>SAFD22520-307</b>	<b>29.1</b>
	<b>FSAFD520</b>	<b>22220K</b>	<b>HA320</b>	<b>LER102</b>	<b>TER102</b>	<b>FR180X10</b>	<b>1</b>	<b>EPR12</b>	<b>FSAFD22520-307</b>	<b>29.1</b>
3.1/2	SAFD520	1220K	HE220	LER103	TER103	FR180X11	2	EPR12	SAFD1520-308	27.8
	FSAFD520	1220K	HE220	LER103	TER103	FR180X11	2	EPR12	FSAFD1520-308	27.8
	SAFD520	2220K	HE320	LER103	TER103	FR180X10	1	EPR12	SAFD2520-308	29.3
	FSAFD520	2220K	HE320	LER103	TER103	FR180X10	1	EPR12	FSAFD2520-308	29.3
	SAFD520	22220K	HE320	LER103	TER103	FR180X10	1	EPR12	SAFD22520-308	29.1
	FSAFD520	22220K	HE320	LER103	TER103	FR180X10	1	EPR12	FSAFD22520-308	29.1
3.15/16	SAFD522	1222K	H222	LER109	TER109	FR200X12.5	2	EPR13	SAFD1522-315	40.0
	SAFD522	2222K	H322	LER109	TER109	FR200X10	1	EPR13	SAFD2522-315	42.1
	<b>SAFD522</b>	<b>22222K</b>	<b>H322</b>	<b>LER109</b>	<b>TER109</b>	<b>FR200X10</b>	<b>1</b>	<b>EPR13</b>	<b>SAFD22522-315</b>	<b>41.9</b>
4	SAFD522	1222K	HE222	LER110	TER110	FR200X12.5	2	EPR13	SAFD1522-400	40.0
	SAFD522	2222K	HE322	LER110	TER110	FR200X10	1	EPR13	SAFD2522-400	42.1
	SAFD522	22222K	HE322	LER110	TER110	FR200X10	1	EPR13	SAFD22522-400	41.9
4.3/16	SAFD524	22224K	HA3124	LER113	TER113	FR215X10	1	EPR14	SAFD22524-403	48.0
4.1/4	SAFD524	22224K	HE3124	LER114	TER114	FR215X10	1	EPR14	SAFD22524-404	48.0
4.7/16	SAFD526	22226K	HA3126	LER117	TER117	FR230X10	1	EPR15	SAFD22526-407	71.0
4.1/2	SAFD526	22226K	HE3126	LER118	TER118	FR230X10	1	EPR15	SAFD22526-408	71.0
4.15/16	SAFD528	22228K	HA3128	LER122	TER122	FR250X10	1	EPR27	SAFD22528-415	80.0
	5	SAFD528	22228K	HE3128	LER123	TER123	FR250X10	1	EPR27	SAFD22528-500
5.3/16	SAFD530	22230K	HA3130	LER125	TER125	FR270X10	1	EPR16	SAFD22530-503	95.0
5.1/4	SAFD530	22230K	HE3130	LER126	TER126	FR270X10	1	EPR16	SAFD22530-504	95.0
5.7/16	SAFD532	22232K	HA3132	LER130	TER130	FR290X10	1	EPR16	SAFD22532-507	110.0
5.1/2	SAFD532	22232K	HE3132	LER131	TER131	FR290X10	1	EPR16	SAFD22532-508	110.0
5.15/16	SAFD534	22234K	HA3134	LER140	TER140	FR310X10	1	EPR18	SAFD22534-515	127.0
	6	SAFD534	22234K	HE3134	LER141	TER141	FR310X10	1	EPR18	SAFD22534-600
6.7/16	SAFD536	22236K	HA3136	LER148	TER148	FR320X10	1	EPR19	SAFD22536-607	142.0
6.1/2	SAFD536	22236K	HE3136	LER149	TER149	FR320X10	1	EPR19	SAFD22536-608	142.0
6.15/16	SAFD538	22238K	HA3138	LER155	TER155	FR340X10	1	EPR20	SAFD22538-615	161.0
	7	SAFD538	22238K	HE3138	LER156	TER156	FR340X10	1	EPR20	SAFD22538-700
7.3/16	SAFD540	22240K	HA3140	LER159	TER159	FR360X10	1	EPR21	SAFD22540-703	200.0
7.15/16	SAFD544	22244K	HA3144	LER167	TER167	FR400X10	1	EPR23	SAFD22544-715	264.0
	8	SAFD544	22244K	HE3144	LER168	TER168	FR400X10	1	EPR23	SAFD22544-800

<sup>(1)</sup> For housing dimensions see page 20. <sup>(2)</sup> Bolded items denote common shaft sizes and include the LER seal rings and FR fixing ring. All other sizes will incur separate charges for these items. Please refer to page 3 for complete assembly details.  
For oil lubrication, please consult NSK Engineering.

# SAFD SERIES

## SAFD SPLIT PILLOW BLOCK HOUSING DIMENSIONS

### DUCTILE IRON



Housing No.	H	L	A1	H1	J		J2	H2	A	X	S Mounting Bolts (No. Req'd)	Wt. kg	D mm	g mm	d2 mm	d3 mm	Cap Bolts	ft-lbf <sup>(1)</sup>
					Max.	Min.												
SAFD 509	2-1/4	8-1/4	2-3/8	13/16	7	6-1/4		4-3/8	3-5/8	.114	(2) 1/2	4.2	85	29	41.66	52.4	(2) 3/8-16	17.7
SAFD 510	2-1/2	8-1/4	2-3/8	15/16	7	6-1/2		4-3/4	3-5/8	.133	(2) 1/2	4.6	90	30	48	58.75	(2) 3/8-16	17.7
SAFD 511	2-3/4	9-5/8	2-3/4	15/16	7-7/8	7-3/8		5-1/4	3-7/8	.114	(2) 5/8	5.7	100	31	54.36	65.1	(2) 1/2-13	38.8
SAFD 513	3	11	3-1/8	1	9-1/2	8-1/8		5-15/16	4-1/2	.157	(2) 5/8	8.3	120	39	60.96	71.7	(2) 1/2-13	38.8
FSAFD 513	3	11	3-1/8	1	9-1/2	8-1/8	2	5-15/16	4-1/2	.157	(4) 1/2	8.3	120	39	60.96	71.7	(2) 1/2-13	38.8
SAFD 515	3-1/4	11-1/4	3-1/8	1-1/8	9-5/8	8-5/8		6-3/8	4-3/4	.118	(2) 5/8	8.3	130	37	67.82	80.98	(2) 1/2-13	38.8
FSAFD 515	3-1/4	11-1/4	3-1/8	1-1/8	9-5/8	8-5/8	1-7/8	6-3/8	4-3/4	.118	(4) 1/2	8.3	130	37	67.82	80.98	(2) 1/2-13	38.8
SAFD 516	3-1/2	13	3-1/2	1-3/16	11	9-5/8		6-7/8	4-7/8	.187	(2) 3/4	12.2	140	43	77.34	90.5	(4) 1/2-13	38.8
FSAFD 516	3-1/2	13	3-1/2	1-3/16	11	9-5/8	2-1/8	6-7/8	4-7/8	.187	(4) 5/8	12.2	140	43	77.34	90.5	(4) 1/2-13	38.8
SAFD 517	3-3/4	13	3-1/2	1-1/4	11	9-7/8		7-5/16	5	.187	(2) 3/4	13.5	150	46	83.7	96.85	(4) 1/2-13	38.8
FSAFD 517	3-3/4	13	3-1/2	1-1/4	11	9-7/8	2-1/8	7-5/16	5	.187	(4) 5/8	13.5	150	46	83.7	96.85	(4) 1/2-13	38.8
SAFD 518	4	13-3/4	3-7/8	1-5/16	11-5/8	10-3/8		7-3/4	5-3/4	.187	(2) 3/4	16.6	160	50	91.06	110.11	(4) 1/2-13	38.8
FSAFD 518	4	13-3/4	3-7/8	1-5/16	11-5/8	10-3/8	2-1/8	7-3/4	5-3/4	.187	(4) 5/8	16.6	160	50	91.06	110.11	(4) 1/2-13	38.8
SAFD 520	4-1/2	15-1/4	4-3/8	1-3/4	13-1/8	11-5/8		8-3/4	6-1/8	.187	(2) 7/8	22.8	180	56	94.23	113.28	(4) 5/8-11	83.3
FSAFD 520	4-1/2	15-1/4	4-3/8	1-3/4	13-1/8	11-5/8	2-3/8	8-3/4	6-1/8	.187	(4) 3/4	22.8	180	56	94.23	113.28	(4) 5/8-11	83.3
SAFD 522	4-15/16	16-1/2	4-3/4	2	14-1/2	12-5/8	2-3/4	9-5/8	6-1/2	.187	(4) 3/4	27.3	200	63	106.93	125.98	(4) 5/8-11	83.3
SAFD 524	5-1/4	16-1/2	4-3/4	2-1/8	14-1/2	13-1/4	2-3/4	10-1/4	7-3/8	.187	(4) 3/4	32.3	215	68	113.8	132.84	(4) 5/8-11	83.3
SAFD 526	6	18-3/8	5-1/8	2-3/8	16	14-5/8	3-1/4	11-1/2	8	.187	(4) 7/8	43.0	230	74	121.74	140.8	(4) 3/4-10	104.9
SAFD 528	6	20-1/8	5-7/8	2-3/8	17-1/8	16	3-3/8	11-3/4	7-5/8	.187	(4) 1	50.0	250	78	132.84	151.9	(4) 3/4-10	104.9
SAFD 530	6-5/16	21-1/4	6-1/4	2-1/2	18-1/4	17	3-3/4	12-1/2	8-3/8	.187	(4) 1	62.6	270	83	142.88	161.93	(4) 3/4-10	104.9
SAFD 532	6-11/16	22	6-1/4	2-5/8	19-1/4	17-3/8	3-3/4	13-5/16	8-3/4	.187	(4) 1	71.5	290	90	146.05	171.45	(4) 3/4-10	104.9
SAFD 534	7-1/16	24-3/4	6-3/4	2-3/4	21-5/8	19-3/8	4-1/4	14-3/16	9-5/8	.187	(4) 1	83.7	310	96	161.11	186.51	(4) 1-8	236
SAFD 536	7-1/2	26-3/4	7-1/8	3	23-5/8	20-7/8	4-5/8	14-7/16	10	.187	(4) 1	98.5	320	96	172.21	197.6	(4) 1-8	236
SAFD 538	7-7/8	28	7-1/2	3-1/8	24-3/8	21-5/8	4-1/2	15-11/16	10-3/4	.187	(4) 1-1/4	129.3	340	102	187.53	212.93	(4) 1-8	236
SAFD 540	8-1/4	29-1/2	8	3-3/8	25	22-1/2	5	16-1/2	11-1/4	.187	(4) 1-1/4	149.7	360	108	192.28	217.68	(4) 1-8	236
SAFD 544	9-1/2	32-3/4	8-3/4	3-3/4	27-7/8	24-3/4	5-1/4	18-5/8	12	.187	(4) 1-1/2	177.5	400	111	211.84	237.24	(4) 1-8	236

<sup>(1)</sup> Recommended tightening torque for cap bolts in foot pounds (ft-lbf).

All dimensions are in inches unless otherwise indicated.  
For oil lubrication, please contact NSK Engineering.

# LUBRICATION

## Grease Quantity

The quantity of grease to be packed in a housing depends on the housing design and free space, grease characteristics, and ambient temperature. For example, the bearings for the main shafts of machine tools, where the accuracy may be impaired by a small temperature rise, require only a small amount of grease.

Sufficient grease must be packed inside the bearing including the cage guide face. The available space inside the housing to be packed with grease depends on the speed as follows:

1/2 to 2/3 of the space...When the speed is less than 50% of the limiting speed.

1/3 to 1/2 of the space...When the speed is more than 50% of the limiting speed.

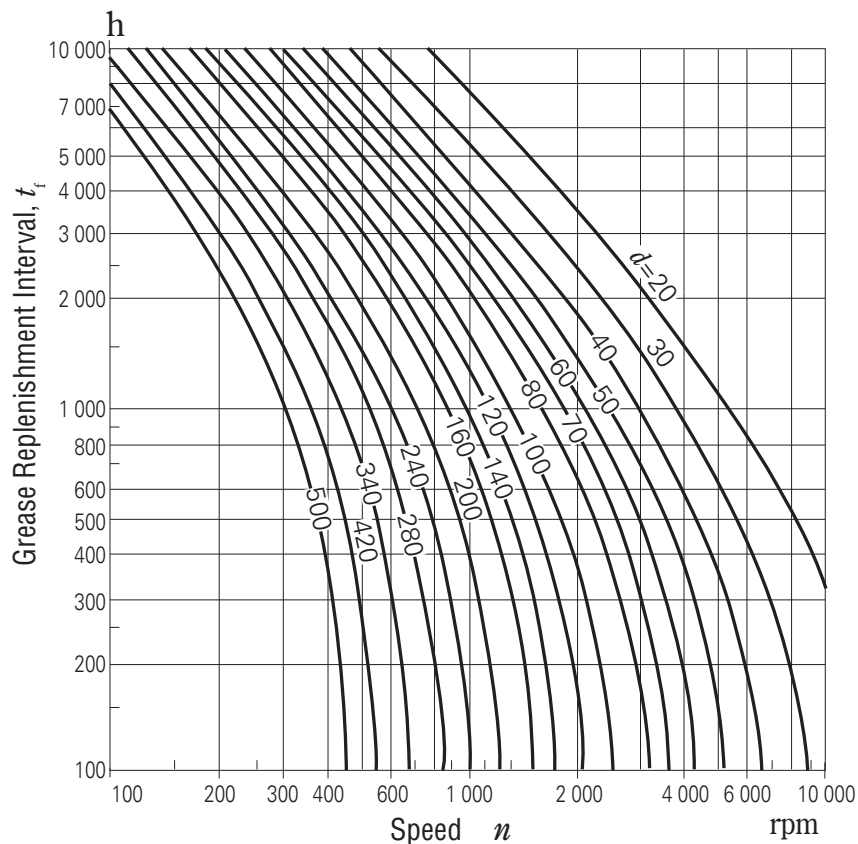
Use the following formula to calculate how much grease is to be added at the re-lubrication interval:

$$G = 0.005 * D * B$$

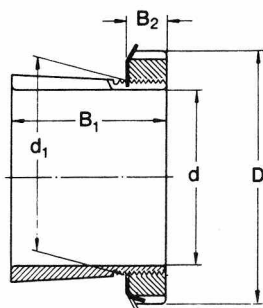
Where G = Grams  
D = Outside Diameter (mm)  
B = Bearing Width (mm)

## Replenishing Interval

Periodic replenishment is required regardless of the type of grease used. The graph below shows the replenishment time intervals for spherical roller bearings running at different speeds. These figures apply only if the temperature of the bearings is less than 70°C; the replenishment time interval must be reduced by half for every 15°C temperature rise of the bearings.



# ADAPTER SLEEVES



Shaft (d) Sleeve	$d_1$	D	$B_1$	$B_2$	Mass (kg)	Nut	Washer	Wrench
3/4 HE205	M 25 x 1.5	38	26	8	0.1	KM 5	MB 5	HN 5
3/4 HE305	M 25 x 1.5	38	29	8	0.1	KM 5	MB 5	HN 5
20 H205	M 25 x 1.5	38	26	8	0.1	KM 5	MB 5	HN 5
20 H305	M 25 x 1.5	38	29	8	0.1	KM 5	MB 5	HN 5
20 H2305	M 25 x 1.5	38	35	8	0.1	KM 5	MB 5	HN 5
15/16 HA206	M 30 x 1.5	45	27	8	0.1	KM 6	MB 6	HN 6
15/16 HA306	M 30 x 1.5	45	31	8	0.1	KM 6	MB 6	HN 6
15/16 HA2306	M 30 x 1.5	45	38	8	0.1	KM 6	MB 6	HN 6
25 H206	M 30 x 1.5	45	27	8	0.1	KM 6	MB 6	HN 6
25 H306	M 30 x 1.5	45	31	8	0.1	KM 6	MB 6	HN 6
25 H2306	M 30 x 1.5	45	38	8	0.1	KM 6	MB 6	HN 6
1 HE206	M 30 x 1.5	45	27	8	0.1	KM 6	MB 6	HN 6
1 HE306	M 30 x 1.5	45	31	8	0.1	KM 6	MB 6	HN 6
1 HE2306	M 30 x 1.5	45	38	8	0.1	KM 6	MB 6	HN 6
30 H207	M 35 x 1.5	52	29	9	0.1	KM 7	MB 7	HN 7
30 H307	M 35 x 1.5	52	35	9	0.1	KM 7	MB 7	HN 7
30 H2307	M 35 x 1.5	52	43	9	0.2	KM 7	MB 7	HN 7
1.3/16 HA207	M 35 x 1.5	52	29	9	0.1	KM 7	MB 7	HN 7
1.3/16 HA307	M 35 x 1.5	52	35	9	0.1	KM 7	MB 7	HN 7
1.3/16 HA2307	M 35 x 1.5	52	43	9	0.2	KM 7	MB 7	HN 7
1.3/16 HA307	M 35 x 1.5	52	35	9	0.1	KM 7	MB 7	HN 7
1.1/4 HE208	M 40 x 1.5	58	31	10	0.2	KM 8	MB 8	HN 8
1.1/4 HE308	M 40 x 1.5	58	36	10	0.2	KM 8	MB 8	HN 8
1.1/4 HE2308	M 40 x 1.5	58	46	10	0.2	KM 8	MB 8	HN 8
1.1/4 HE308	M 40 x 1.5	58	36	10	0.2	KM 8	MB 8	HN 8
1.1/4 HE2308	M 40 x 1.5	58	46	10	0.2	KM 8	MB 8	HN 8
35 H208	M 40 x 1.5	58	31	10	0.2	KM 8	MB 8	HN 8
35 H308	M 40 x 1.5	58	36	10	0.2	KM 8	MB 8	HN 8
35 H2308	M 40 x 1.5	58	46	10	0.2	KM 8	MB 8	HN 8
1.1/2 HE209	M 45 x 1.5	65	33	11	0.2	KM 9	MB 9	HN 9
1.7/16 HA209	M 45 x 1.5	65	33	11	0.2	KM 9	MB 9	HN 9
40 H209	M 45 x 1.5	65	33	11	0.2	KM 9	MB 9	HN 9
1.1/2 HE309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
1.7/16 HA309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
40 H309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
1.11/16 HA210	M 50 x 1.5	70	35	12	0.3	KM 10	MB 10	HN 10
1.3/4 HE210	M 50 x 1.5	70	35	12	0.3	KM 10	MB 10	HN 10
45 H210	M 50 x 1.5	70	35	12	0.3	KM 10	MB 10	HN 10
1.11/16 HA310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
1.3/4 HE310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
45 H310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
1.15/16 HA211	M 55 x 2	75	37	12	0.3	KM 11	MB 22	HN 11
2 HE211	M 55 x 2	75	37	12	0.3	KM 11	MB 22	HN 11
50 H211	M 55 x 2	75	37	12	0.3	KM 11	MB 22	HN 11
1.1/2 HE309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
40 H309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
1.7/16 HA309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
1.1/2 HE309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
40 H309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9
1.7/16 HA309	M 45 x 1.5	65	39	11	0.3	KM 9	MB 9	HN 9

# ADAPTER SLEEVES

Shaft (d)	Sleeve	d <sub>1</sub>	D	B <sub>1</sub>	B <sub>2</sub>	Mass (kg)	Nut	Washer	Wrench
50	H311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
1.15/16	HA311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
2	HE311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
50	H311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
1.1/2	HE2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
40	H2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
1.7/16	HA2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
1.1/2	HE2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
40	H2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
1.7/16	HA2309	M 45 x 1.5	65	50	11	0.3	KM 9	MB 9	HN 9
55	H212	M 60 x 2	80	38	13	0.4	KM 12	MB 12	HN 12
1.11/16	HA310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
1.3/4	HE310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
45	H310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
1.11/16	HA310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
1.3/4	HE310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
45	H310	M 50 x 1.5	70	42	12	0.3	KM 10	MB 10	HN 10
55	H312	M 60 x 2	80	47	13	0.4	KM 12	MB 12	HN 12
1.11/16	HA2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
1.3/4	HE2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
45	H2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
1.11/16	HA2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
1.3/4	HE2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
45	H2310	M 50 x 1.5	70	55	12	0.4	KM 10	MB 10	HN 10
2.1/4	HE213	M 65 x 2	85	40	14	0.4	KM 13	MB 13	HN 13
60	H213	M 65 x 2	85	40	14	0.4	KM 13	MB 13	HN 13
2.3/16	HA213	M 65 x 2	85	40	14	0.4	KM 13	MB 13	HN 13
1.15/16	HA311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
2	HE311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
50	H311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
1.15/16	HA311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
2	HE311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
50	H311	M 55 x 2	75	45	12	0.3	KM 11	MB 11	HN 11
60	H313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
2.1/4	HE313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
60	H313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
2.3/16	HA313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
1.15/16	HA2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
2	HE2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
50	H2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
1.15/16	HA2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
2	HE2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
50	H2311	M 55 x 2	75	59	12	0.4	KM 11	MB 11	HN 11
2.1/2	HE215	M 75 x 2	98	43	15	0.7	KM 15	MB 15	HN 15
2.7/16	HA215	M 75 x 2	98	43	15	0.7	KM 15	MB 15	HN 15
65	H215	M 75 x 2	98	43	15	0.7	KM 15	MB 15	HN 15
55	H312	M 60 x 2	80	47	13	0.4	KM 12	MB 12	HN 12
65	H315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
2.1/2	HE315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
2.7/16	HA315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
65	H315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
55	H2312	M 60 x 2	80	62	13	0.5	KM 12	MB 12	HN 12
2.11/16	HA216	M 80 x 2	105	46	17	0.9	KM 16	MB 16	HN 16
2.3/4	HE216	M 80 x 2	105	46	17	0.9	KM 16	MB 16	HN 16
70	H216	M 80 x 2	105	46	17	0.9	KM 16	MB 16	HN 16
2.1/4	HE313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
60	H313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
2.3/16	HA313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
2.1/4	HE313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
60	H313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
2.3/16	HA313	M 65 x 2	85	50	14	0.5	KM 13	MB 13	HN 13
70	H316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.11/16	HA316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.3/4	HE316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16

## ADAPTER SLEEVES

Shaft (d) Sleeve	d <sub>1</sub>	D	B <sub>1</sub>	B <sub>2</sub>	Mass (kg)	Nut	Washer	Wrench
70 H316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.1/4 HE2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
60 H2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
2.3/16 HE2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
2.1/4 HE2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
60 H2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
2.3/16 HA2313	M 65 x 2	85	65	14	0.6	KM 13	MB 13	HN 13
2.15/16 HA217	M 85 x 2	110	50	18	1.0	KM 17	MB 17	HN 17
3 HE217	M 85 x 2	110	50	18	1.0	KM 17	MB 17	HN 17
75 H217	M 85 x 2	110	50	18	1.0	KM 17	MB 17	HN 17
75 H317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
2.15/16 HA317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
3 HE317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
75 H317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
3.1/4 HE218	M 90 x 2	120	52	18	1.2	KM 18	MB 18	HN 18
3.3/16 HA218	M 90 x 2	120	52	18	1.2	KM 18	MB 18	HN 18
80 H218	M 90 x 2	120	52	18	1.2	KM 18	MB 18	HN 18
2.1/2 HE315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
2.7/16 HA315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
65 H315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
2.1/2 HE315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
2.7/16 HA315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
65 H315	M 75 x 2	98	55	15	0.8	KM 15	MB 15	HN 15
3.1/4 HE318	M 90 x 2	120	65	18	1.4	KM 18	MB 18	HN 18
3.3/16 HA318	M 90 x 2	120	65	18	1.4	KM 18	MB 18	HN 18
80 H318	M 90 x 2	120	65	18	1.4	KM 18	MB 18	HN 18
2.1/2 HE2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
2.7/16 HA2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
65 H2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
2.1/2 HE2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
2.7/16 HA2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
65 H2315	M 75 x 2	98	73	15	1.1	KM 15	MB 15	HN 15
3.1/4 HE2318	M 90 x 2	120	86	18	1.7	KM 18	MB 18	HN 18
3.3/16 HA2318	M 90 x 2	120	86	18	1.7	KM 18	MB 18	HN 18
80 H2318	M 90 x 2	120	86	18	1.7	KM 18	MB 18	HN 18
85 H219	M 95 x 2	125	55	19	1.3	KM 19	MB 19	HN 19
2.11/16 HA316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.3/4 HE316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
70 H316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.11/16 HA316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
2.3/4 HE316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
70 H316	M 80 x 2	105	59	17	1.0	KM 16	MB 16	HN 16
85 H319	M 95 x 2	125	68	19	1.6	KM 19	MB 19	HN 19
2.11/16 HA2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
2.3/4 HE2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
70 H2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
2.11/16 HA2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
2.3/4 HE2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
70 H2316	M 80 x 2	105	78	17	1.3	KM 16	MB 16	HN 16
3.1/2 HE220	M 100 x 2	130	58	20	1.5	KM 20	MB 20	HN 20
3.7/16 HA220	M 100 x 2	130	58	20	1.5	KM 20	MB 20	HN 20
90 H220	M 100 x 2	130	58	20	1.5	KM 20	MB 20	HN 20
2.15/16 HA317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
3 HE317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
75 H317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
2.15/16 HA317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
3 HE317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
75 H317	M 85 x 2	110	63	18	1.2	KM 17	MB 17	HN 17
3.1/2 HE320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
3.7/16 HA320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
90 H320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
2.15/16 HA2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17
3 HE2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17
75 H2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17



# ADAPTER SLEEVES

Shaft (d) Sleeve	d <sub>1</sub>	D	B <sub>1</sub>	B <sub>2</sub>	Mass (kg)	Nut	Washer	Wrench
2.15/16 HA2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17
3 HE2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17
75 H2317	M 85 x 2	110	82	18	1.5	KM 17	MB 17	HN 17
3.1/2 HE2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
3.7/16 HA2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
90 H2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
100 H222	M 110 x 2	145	63	21	1.9	KM 22	MB 22	HN 22
3.15/16 H222	M 110 x 2	145	63	21	1.9	KM 22	MB 22	HN 22
4 HE222	M 110 x 2	145	63	21	1.9	KM 22	MB 22	HN 22
100 H322	M 110 x 2	145	77	21	2.2	KM 22	MB 22	HN 22
3.15/16 H322	M 110 x 2	145	77	21	2.2	KM 22	MB 22	HN 22
4 HE322	M 110 x 2	145	77	21	2.2	KM 22	MB 22	HN 22
85 H2319	M 95 x 2	125	90	19	1.9	KM 19	MB 19	HN 19
100 H2322	M 110 x 2	145	105	21	2.8	KM 22	MB 22	HN 22
3.15/16 H2322	M 110 x 2	145	105	21	2.8	KM 22	MB 22	HN 22
4 HE2322	M 110 x 2	145	105	21	2.8	KM 22	MB 22	HN 22
3.1/2 HE320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
3.7/16 HA320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
3.1/2 HE320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
3.7/16 HA320	M 100 x 2	130	71	20	1.7	KM 20	MB 20	HN 20
110 H3124	M 120 x 2	155	88	22	2.7	KM 24	MB 24	IMPACT 23-30
4.1/4 HE3124	M 120 x 2	155	88	22	2.7	KM 24	MB 24	IMPACT 23-30
4.3/16 HA3124	M 120 x 2	155	88	22	2.7	KM 24	MB 24	IMPACT 23-30
3.1/2 HE2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
3.7/16 HA2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
90 H2320	M 100 x 2	130	97	20	2.2	KM 20	MB 20	HN 20
110 H2324	M 120 x 2	155	112	22	3.2	KM 24	MB 24	IMPACT 23-30
4.1/4 HE2324	M 120 x 2	155	112	22	3.2	KM 24	MB 24	IMPACT 23-30
4.3/16 HA2324	M 120 x 2	155	112	22	3.2	KM 24	MB 24	IMPACT 23-30
115 H3126	M 130 x 2	165	92	23	3.7	KM 26	MB 26	IMPACT 23-30
4.1/2 HE3126	M 130 x 2	165	92	23	3.7	KM 26	MB 26	IMPACT 23-30
4.7/16 HA3126	M 130 x 2	165	92	23	3.7	KM 26	MB 26	IMPACT 23-30
115 H2326	M 130 x 2	165	121	23	4.6	KM 26	MB 26	IMPACT 23-30
4.1/2 HE2326	M 130 x 2	165	121	23	4.6	KM 26	MB 26	IMPACT 23-30
4.7/16 HA2326	M 130 x 2	165	121	23	4.6	KM 26	MB 26	IMPACT 23-30
125 H3128	M 140 x 2	180	97	24	4.4	KM 28	MB 28	IMPACT 23-30
4.15/16 HA3128	M 140 x 2	180	97	24	4.4	KM 28	MB 28	IMPACT 23-30
5 HE3128	M 140 x 2	180	97	24	4.4	KM 28	MB 28	IMPACT 23-30
125 H2328	M 140 x 2	180	131	24	5.5	KM 28	MB 28	IMPACT 23-30
4.15/16 HA2328	M 140 x 2	180	131	24	5.5	KM 28	MB 28	IMPACT 23-30
5 HE2328	M 140 x 2	180	131	24	5.5	KM 28	MB 28	IMPACT 23-30
135 H3130	M 150 x 2	195	111	26	5.5	KM 30	MB 30	IMPACT 23-30
5.1/4 HE3130	M 150 x 2	195	111	26	5.5	KM 30	MB 30	IMPACT 23-30
5.3/16 HA3130	M 150 x 2	195	111	26	5.5	KM 30	MB 30	IMPACT 23-30
135 H2330	M 150 x 2	195	139	26	6.6	KM 30	MB 30	IMPACT 23-30
5.1/4 HE2330	M 150 x 2	195	139	26	6.6	KM 30	MB 30	IMPACT 23-30
5.3/16 HA2330	M 150 x 2	195	139	26	6.6	KM 30	MB 30	IMPACT 23-30
140 H3132	M 160 x 3	210	119	28	7.7	KM 32	MB 32	IMPACT 30-40
5.1/2 HE3132	M 160 x 3	210	119	28	7.7	KM 32	MB 32	IMPACT 30-40
5.7/16 HA3132	M 160 x 3	210	119	28	7.7	KM 32	MB 32	IMPACT 30-40
140 H2332	M 160 x 3	210	147	28	9.2	KM 32	MB 32	IMPACT 30-40
5.1/2 HE2332	M 160 x 3	210	147	28	9.2	KM 32	MB 32	IMPACT 30-40
5.7/16 HA2332	M 160 x 3	210	147	28	9.2	KM 32	MB 32	IMPACT 30-40
5.15/16 HA3134	M 170 x 3	220	122	29	8.4	KM 34	MB 34	IMPACT 30-40
6 HE3134	M 170 x 3	220	122	29	8.4	KM 34	MB 34	IMPACT 30-40
6.7/16 HA3136	M 180 x 3	230	131	30	9.5	KM 36	MB 36	IMPACT 30-40
6.1/2 HE3136	M 180 x 3	230	131	30	9.5	KM 36	MB 36	IMPACT 30-40
6.15/16 HA3138	M 190 x 3	240	141	31	11.0	KM 38	MB 38	IMPACT 30-40
7 HE3138	M 190 x 3	240	141	31	11.0	KM 38	MB 38	IMPACT 30-40
7.3/16 HA3140	M 200 x 3	250	150	32	12.0	KM 40	MB 40	IMPACT 30-40
7.15/16 HA3144	M 220 x 4	280	161	32	14.7	HM 44T	MB 44	IMPACT 40-52
8 HE3144	M 220 x 4	280	161	32	14.7	HM 44T	MB 44	IMPACT 40-52

# NSK Bearing Maintenance Tools

NSK is a global leader in bearing manufacturing and related technologies. Our offering of maintenance tools is an extension of our position as an authority in maintenance reliability. Using the proper maintenance tools for bearing installation and removal ensures long reliable machine life, ease of tear down and quick turnaround time.

NSK's family of maintenance tools consists of:

- Sine Bar Gages
- Pullers
- Straighteners
- Pumps
- Jack-Up Nut
- Bearing Heaters
- Pushers
- Hydraulic Nuts
- Wrenches
- Roll Neck Lifting Tools
- Taper Gage (Shaft Taper)
- Ring Gages (Housing Bore)
- GN Gages (Radial Clearance)

Our extensive offering of tools is backed by the NSK name and comes in full size ranges and convenient and high quality carrying cases. Purchase of any of NSK's maintenance tools can be made through an authorized NSK distributor.

NSK is dedicated to being your partner and supplier of choice for your motion and control needs. If you have questions relating to NSK maintenance tools or require assistance, please speak with your local authorized distributor, your local NSK representative or email us at [info@ca.nsk.com](mailto:info@ca.nsk.com).

## NSK Sine Bar Gages



Accurate fit between a tapered bore bearing and its journal is critical if a bearing is to reach maximum life. Certified NSK Sine Bar Gages are designed to provide an accurate and easy method to measure a journal's taper, size, contact area and out of roundness.

A complete sine bar gage set for measurement of either 1:12 or 1:30 shaft tapered journals consists of:

- 3,4,5,5,7,10 & 14 inch long sine bar gages
- a strap
- wooden box for transportation
- journal details charts
- 2 sine bar blocks
- calibration reports
- 2 clamps
- instructions for use

NSK sine bars are coated with a special anti-rusting treatment, come with easy to read laminated instructions and are available individually, in combination or as complete sets. They are lightweight, easy to handle and a cost effective way to ensure maximum bearing life.

## NSK Bearing Heaters



Induction heaters are a preferred and much safer method of heating a bearing than using a flame or oil bath. Bearing heaters produce strong alternating magnetic fields that induce eddy currents in the metals. The currents cause rapid and efficient heating of the component and the low voltage output eliminates any hazards due to shocks or sparks.

Bearing heaters from NSK are a fast, safe and efficient way to mount straight bore bearings onto shafts. They provide uniform inner ring heating that helps to reduce bearing mounting, time and cost. With automatic temperature and demagnetizing control features, a light and compact design, and the versatility to heat many different bearing sizes and types of components, NSK bearing heaters are a must have for maintenance professionals.

# Pullers, Pushers, Straighteners & Tri-Section Press Plates

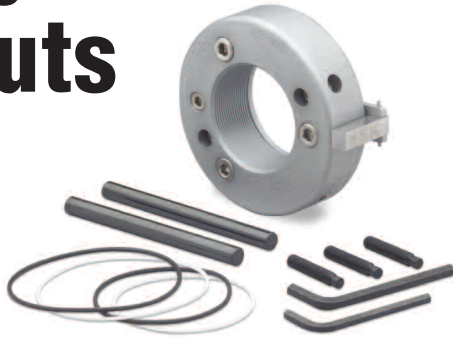


Pullers, pushers, straighteners and tri-section press plates are useful in the quick, easy and safe installation and removal of bearings, rings, pulleys and gears. The use of these tools is helpful in protecting the shaft, bearings and surrounding equipment from damage. They also help reduce the potential for bodily harm to the operator.

NSK's family of pullers, pushers, straighteners and tri-section press plates come in a full range of sizes and come individually or in kits specifically matched to customer needs.

NSK offers a hydraulic pusher, puller and tri-section press plate in a single heavy duty case making transportation and storage more convenient as well as reducing the possibility of lost parts. Pullers are available in non-interchangeable standard and high capacity designs. The high capacity design includes a high pressure cylinder and cobra jaw. Hydraulic pullers and pushers from NSK incorporate coarse threads which make it easier and quicker to assemble than competitive bearing removal products.

# NSK Hydraulic Nuts



Hydraulic nuts from NSK utilize an axial drive-up method to ensure the accurate and quick installation of tapered bore bearings. The axial drive-up method ensures that the internal clearance and interference fit are correct by monitoring the movement of the piston, and thus the bearing's inner ring, in relation to the hydraulic nut. This method minimizes the need to continually check the clearance reduction with feeler gages.

The benefit of NSK's patented axial drive-up method is that it does not require the use of dial indicator or charts. Competitive axial drive-up systems require a special dial indicator and the use of printed charts, which not only add to the cost but can also be difficult to read.

NSK hydraulic nuts are coated with Armoloy, a special permanent anti-rusting layer, making them much more durable than other offerings. They also use NPT ports so replacement fittings are inexpensive and easy to obtain. Cranking handles come in standard diameter rod sizes so replacements can be made from standard stock instead of having to buy specialized sizes as is common with competitive offerings. Larger sizes are made with tapped holes for eye bolts for easy lifting.

Hydraulic nuts come complete with jack out bolts that are very useful in making the replacement of seals quick and easy. A full size range is available and all hydraulic nut kits come in a secure carrying case.

# Hydraulic Pump



NSK offers hydraulic pumps that inject oil into hydraulic nuts during bearing installation and simplify the bearing removal process by pumping oil between the inner ring and journal. NSK heavy duty pumps are offered in two sizes, are lightweight and come in a specially designed protective carrying case.

# Spanner Wrench



Spanner wrenches are a simple and inexpensive means of installing small size tapered bore bearings onto shafts and adapter sleeves. Because they clamp onto the slot in a locknut, they do not cause damage to the locknut which frequently occurs when using a hammer and keystock.

NSK standard spanner wrenches are made from 1/4" (7mm) thick plates. The heads of impact spanner wrenches are made of forged steel, which is welded to a strong alloyed steel handle covered by easy grip rubber.

NSK impact-spanner wrenches are heavy duty and can withstand the impact force of a hammer. All wrenches come with a convenient hole for ease of storage or hanging.







## Worldwide Sales Offices

<b>NSK Ltd.-Headquarters, Tokyo, Japan</b> Americas & Europe Department Asia Marketing & Sales Department	<b>www.nsk.com</b> tel: 03-37779-7120 tel:03-3779-7121	<b>New Zealand:</b> NSK New Zealand Ltd. Auckland <b>Philippines:</b> NSK representative office Manila	<b>www.nsk-rhp.co.nz</b> tel:(09) 276-4992 tel:02-759-6246	<b>Spain:</b> NSK Spain S.A. Barcelona tel: 93-575-4041
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