

| SNR : The Bearing Housings



Industry





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Special note:

Information about our **two-part bearing housings SNC** could be found in the catalogue "The SNC Pillow Block Range For Your Application".

Further on, our catalogue "SNOL Innovation in Performance and Economy" will inform you about the two-part bearing housings SNOL with oil lubrication, which can be sent on request.



SNR – Bearing Housings

SNR bearing housings are made for all applications where high performance is needed.

SNR offers a wide range of different bearing housings. All offered types are the best choice regarding design, quality and life time.

SNR bearing housings are optimized to fulfil the requirements especially in the following fields of application:

- Ventilator Industry
- Conveyor Systems
- Escalators
- Textile machines
- Mining.....

Especially for the demand in the ventilator industry we extended our range of oil lubricated double bearing housings (ZLOE) with several new models.

All plummer block housings (grease and oil lubricated) are also obtainable fully assembled with shaft.

Our strengths are particularly geared towards the design and production of special housings. In this area too, we have also developed new solutions in close cooperation with our customers.

Our different production options enable us to produce small and bulk volumes at top quality, quickly and inexpensively.

Our customers have been opting for our SNR products for years because the following points are of importance to them:

- All products from a single source
- High quality standard
- Functional details
- High efficiency
- Maintenance and repairs are easy to do and can be done by our customers

The bearing housing design undergoes constant further development. For this reason we reserve the right to introduce at any given time technical modifications to our products which serve to enhance the technical capability.

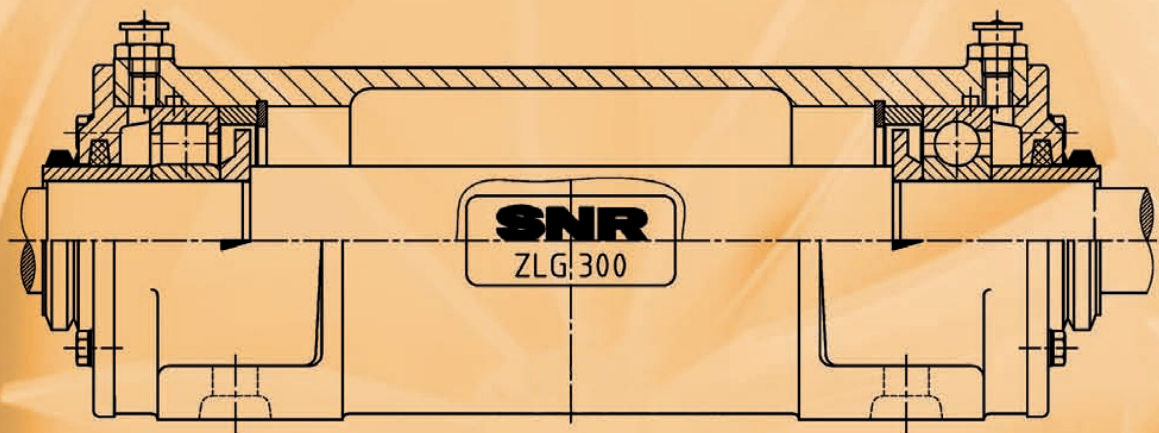
Bearings

Bearings with cylindrical bores

Bearings with cylindrical bores are mounted directly onto the shaft. A shaft fit is to be selected that matches the application and bearings used. The bearing itself must however be firmly mounted onto the shaft. An SNR induction heating device should be used (see annex p. 59) to mount the bearing.

Cylindrical bearings require a shaft shoulder as a contact surface within the housing. This in turn means that the diameter of the inlet or outlet bore in the housing generally deviates from the diameter of the bearing used.

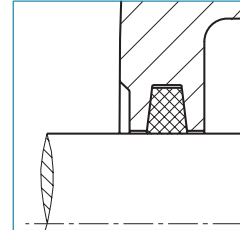
The figure below shows a double bearing housing ZLG 300.



Sealing Systems

Felt strip seal

The felt strip, as under DIN 5419, is the reliable standard sealing for many SNR bearing housings. It is easy to fit and can be used for circumferential speeds up to 5 m/s, after a running-in period (approx. 2 hours) up to 15 m/s. Felt seals are suitable for grease lubrication and temperatures of -20 to +100 °C. At higher temperatures up to approx. 300 °C we will be pleased to offer you a selection of special materials.*

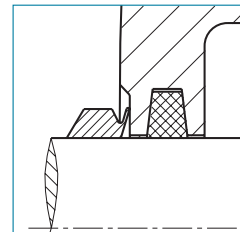


V-ring seal

Bearing housings which are processed on the front end can be equipped with a V-ring seal. We mainly use V-rings in combination with felt strips. Instead of a felt strip a double lip seal can also be used. They provide additional and inexpensive protection against the ingress of moisture into the bearing housing.

V-rings can be used for circumferential speeds up to 15 m/s. They are made of nitrile rubber (NBR) and suitable for temperatures up to 100 °C. Special materials are available on request for higher temperatures (e.g. Viton).*

These sealing variants are not only suitable for grease lubricated housings, but also as an auxiliary sealing for oil lubricated bearing housings.

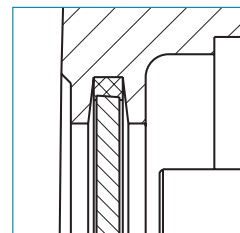


End cover

If the shaft ends in the housing then this is to be sealed with a cover.

End covers are made of grey cast iron and fitted with a felt strip.

They are suitable for temperatures up to 100 °C.



* For temperatures in excess of 120 °C, please contact an SNR engineer concerning bearing and grease selection.



Grease Lubrication

Grease Lubrication

In the overwhelming majority of bearing housing applications grease lubrication is used for the bearing location. Depending on the service case, the initial grease application when fitting should last for a bearing service life. At higher loads, temperatures or speeds the volume of the lubrication medium loses its lubricating capability in the course of service as a consequence of mechanical load, ageing and increasing contamination.

In this case grease must be added to or changed.

If the service case demands regular lubrication then all SNR bearing housings can be equipped with grease nipples. Several of our housings are already equipped as standard with one or more grease nipples. If this should prove insufficient, we would recommend the use of the SNR grease bushing (see annex). This will ensure that there is continuous re-lubrication of the bearing positions for up to 12 months.

If it is necessary to re-lubricate the bearing housing, there is a risk that too much grease may be left in the interior of the housing. The consequence of this can be an increase in bearing temperature up to overheating of the bearing. To prevent this some SNR bearing housings, in particular at high operating temperatures, have grease regulation discs inserted in them.

The grease regulation disc ensures that any excess grease is removed and thus prevents any excessive grease application to the bearing.

For every re-lubrication process the re-lubrication quantity and compatibility of the new grease with the existing grease must be observed.

Information hereto is available in the following tables.

Basic oils

	Mineral oil	Diester oil	Polyalkylene glycol oil	Silicon oil (Methyl)	Silicon oil (Phenyl)	Polyvinyl ether oil
Diester oil	+					
Polyalkylene glycol oil	•	+				
Silicon oil (Methyl)	•	•	•			
Silicon oil (Phenyl)	+	+	•	+		
Polyvinyl ether	+	+	•	•	+	
Perfluoropolyether	•	•	•	•	•	•

+ = mixable

• = not mixable

Source: Klüber



| Bearing Clearance

Double-row spherical roller bearings with tapered bore (models 21000 K, 22000 K, 23000 K with concentricity 1:12 and model 24000 K with concentricity 1:30) can be fitted with an adapter sleeve or a withdrawal sleeve, and directly in the event of a tapered shaft. The mounting process causes the inner ring to be expanded and this in turn reduces the radial clearance. The remaining bearing clearance must be checked after mounting is complete.

How to measure it:

1.) Caution:

One may not perform the measurement on a greased bearing, because the thickness of the lubrication film prevents an accurate measurement from being made.

2.) Tools:

Check the bearing clearance using a feeler gauge. One slides the gauge between the outer ring and rollers. For bearings with a large radial clearance one may not use feeler gauges of more than 0.15 mm, because they are too rigid to be adapted to the spherical bearing surface. Here one should use several smaller tabs together to achieve the desired thickness.

Checking clearance before mounting:

Place the bearing in a vertical position, so that at both sides the rollers abut with the closing edges of the outer ring. Turn the inner ring by hand and apply a radial load in the vertical direction. Determine the theoretical radial clearance with the aid of the table. Slide the gauge between the relieved, i.e. the upper rollers and the outer ring. Now one has to start checking with the smallest gauge between the rollers and the outer ring.

The thickness of the gauge is now increased in increments. The radial clearance lies between the last gauge, which can be moved between the roller and outer ring, and the gauge, which is stuck between the roller and the outer ring.

Checking clearance after mounting:

To determine the remaining clearance proceed as described under the heading "Checking clearance before mounting". Check the reduction of the clearance after mounting in the table below and determine with the aid of the previously described measures, whether the minimum or maximum value has been maintained.



Maintenance: installation-removal Quality, for a longer service life

Know-how and cleanliness are essential factors for bearing installation and removal.

SNR proposes suitable tools, tailored to your needs to optimize bearing service life.

a - Induction heating devices: Fast Therm 20/35/150/300/600/1000

b - Installation kit

c - Wrench for standard and precision locknuts

d - Hydraulic extractor, 10T

e - Kevlar[®], heat-resistant gloves



a



b



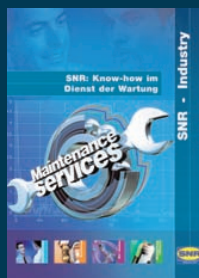
c



d



e



You will find all our products in

SNR's Maintenance catalogue: 64 pages of solutions.

- Lubrication
- Installation & removal
- Measurement & monitoring
- Vibratory analysis, training, ...



SNOE Plummer Block Housings (oil version)

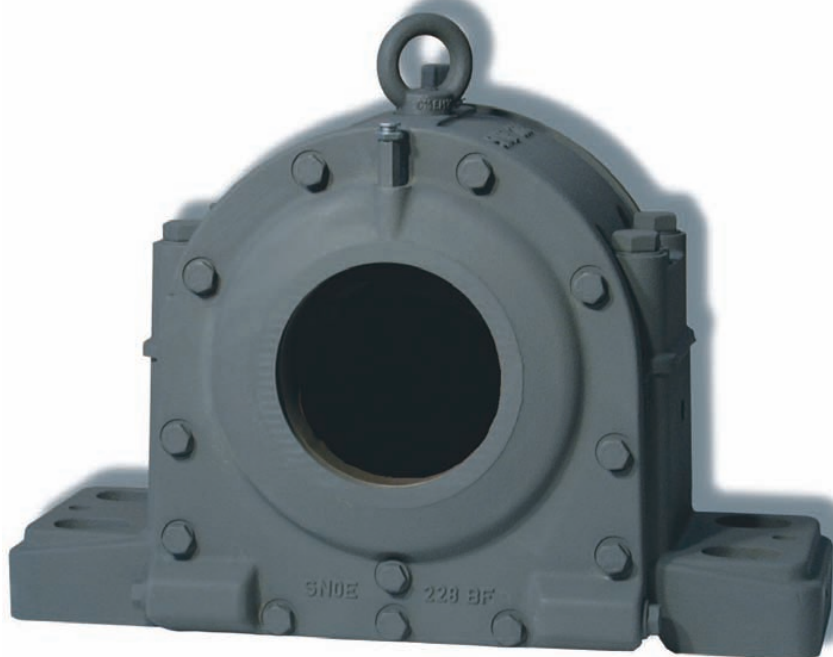
Oil version plummer block housings of models SNOE 200 and SNOE 300 are mounted with spherical roller bearings with cylindrical bore of the 22200 or 22300 series.

Oil lubricated plummer block housings are suitable for high speeds and are, e.g. used in the ventilator industry.

| Designs

SNR supplies these plummer block housings in design A with a sealed cover for the shaft ends and in design B with open cover for through shafts. Plummer block housings can be ordered as floating bearing (AL, BL) and locating bearing (AF, BF). The floating bearing function is safeguarded through the housing adaptation (G6). The bearing is axially fastened in place by the cover in the locating bearing design.

The housing body is two-piece for easier mounting; the cover and labyrinth rings are single piece.





Mine Car Bearing Housings TVN

| TVN Standard Design

SNR mine car bearing housing models TVN 200 and TVN 300 are equipped with self-aligning ball bearings from the 1200, 1300 series or deep groove ball bearings from the 6200, 6300 series. They are primarily used as journal bearing sets for mine cars.

SNR supplies these plummer block housings in design A with a sealed cover for the shaft ends and in design B with open cover for through shafts. Both designs are available as floating and locating bearings.

This bearing unit is frequently used in rough environments. To provide the bearing here with special protection two felt strips are fitted into the cover and the housing. The housing can accommodate a shaft misalignment of up to 0.5°.

| TVN Housings For High Temperature Applications

SNR provides these housings as floating bearings only in design A with sealed cover. When used in high temperatures a special sealing system is required. It consists of two hot steam packagings located between the housing and shaft and an additional flat seal between the cover and housing.

Basically, there are two fields of application:

1. Sand-lime brick industry (environment: hot and moist)
2. Other high temperature applications, e.g. clinker hardening plants (environment: hot and dry)

For deployment in sand-lime brick hardening shops the SNR deep groove ball bearings from the 6200 F605 and 6300 F605 series are used. For sealing and lubrication the special lubricant **HOSTAFILON TF 1645** is used. We recommend filling the entire housing. The lubricant penetrates the smallest gaps in the bearing and forms a protective lubricating film there, which simultaneously protects the housing from inside against any moisture ingress.

For dry high temperature applications SNR deep groove ball bearings from the 6200 F600 and 6300 F600 series are used; they can be recognised by the black surface. The **KLÜBER WOLFRASYN ULAF** paste is used here as lubricant. The bearings must be fully greased before they are mounted. In doing so care must be taken to ensure that sufficient lubricant is applied between the raceways and the balls. Once the carrier fluid evaporates all that is left on the bearing is a powder. For these bearings it is possible to use deep groove ball bearings from the 6200 F604 and 6300 F604 series. These bearings are covered on both sides and greased in advance with **KLÜBER WOLFRASYN ULAF**.

Double And Triple Bearing Housings

Double bearing and triple bearing housings are mainly developed in our company for the mounting of industrial ventilators. Because these bearing units can be mounted simply and have an extremely accurate guide. They have also become established in other industrial branches. At this point only a few application examples are mentioned: large sawing installations, conveying systems and textile machines.

Designs

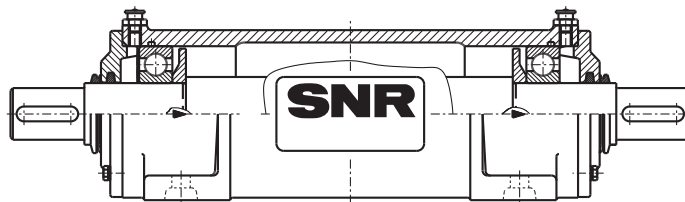
Depending on the load concerned we have developed the following standard variants for you:

Designs AA - AF in a brief overview

Type of load	Designs					
	AA	AB	AC	AD	AE	AF
Radial load	+/+	++/+	++/+	++/++	++/++	+/++
Left/right bearing position						
Axial load – one side	+	+	+	+	+	+
Axial load – both sides	0*	+	-	+	+	+
Speed	++	+	+	+	+	++

0*: Axial loads on both sides are possible, but only without using the spring washer.

Design AA



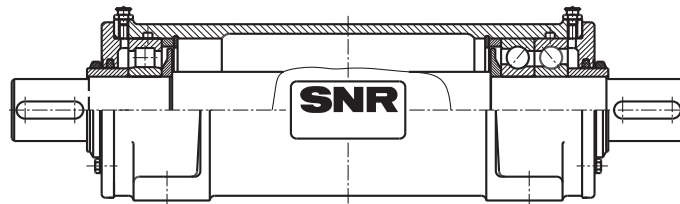
Deep groove ball bearing / Deep groove ball bearing

(AA)

High speeds and radial loads are particularly well absorbed here, whereby the axial loads must act from one direction. The spring washer ensures low-noise and smooth operation, something that is particularly valuable at high speeds. If alternating axial loads can be expected then spring washers cannot be used. Please note that in this case the mounting specifications and shaft dimensions change.



Design AE

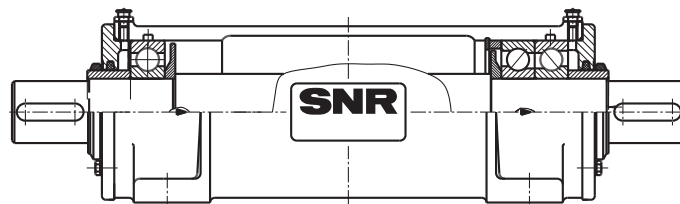


Cylindrical roller bearing / 2x angular contact ball bearings

(AE)

These units are suitable for large axial loads from both directions. They are also able to absorb high radial loads.

Design AF



Deep groove ball bearing / 2x angular contact ball bearings

(AF)

This design type absorbs high axial loads from one direction, while through the deep groove ball bearing on the one side low to medium radial loads are absorbed.



| Seal

Our standard versions are supplied with felt strips and V-rings. This sealing combination acts against any grease escaping while simultaneously preventing any ingress of contamination. For other sealing options such as, e.g. labyrinth ring, GAMMA ring, lamellar rings etc., we will also be glad to provide you with technical assistance.

| Miscellaneous

Double and triple bearing housings are also available as special versions in small quantities. It is also possible to make bores for various measurement devices.

For a bearing seat fit on the shaft for deep groove ball bearings and cylindrical roller bearings we recommend:

- up to 100 mm=> k6
- over 100 mm=> m6

For angular contact ball bearings a fit of j5 is specified.

The speed limit is determined in each case by the bearings used!

If you notify us the dimensions of the mating structure for your design, we will be glad to supply you with double or triple bearing housings fully mounted, pre-lubricated and with a corresponding shaft. That means that you have the advantage of getting the complete unit from one supplier only.



| Sealing System

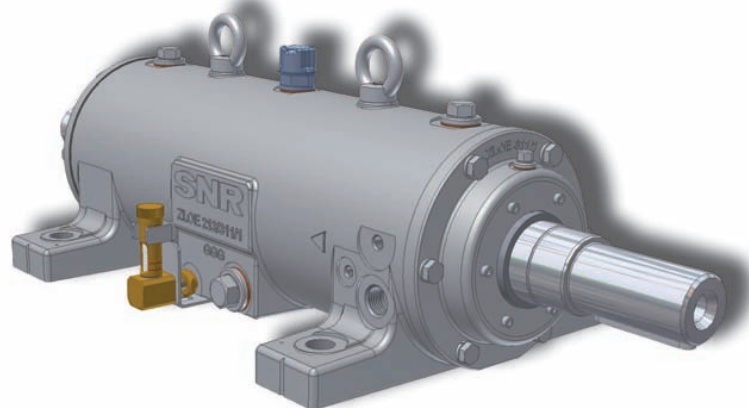
The gap between the housing and the cover is sealed with a flat seal. A labyrinth with threaded seal (in the cover) in the opposite direction to rotation prevents oil escaping between the cover and the shaft.

| Miscellaneous

The housing is fastened on the clamping surface using four foot fastening bolts. The housing foot is equipped with punch marks; these enable the housing to be located after mounting with the aid of straight pins.

The housing body and the cover are made as standard from grey cast iron. Depending on the service case they can also be made from other materials. Several models are available in spheroidal graphite iron.

Located at each bearing position are three bores for connection of various measurement and monitoring devices. These bores are sealed in delivery condition with plastic plugs.



Flange Bearing Housings F 11200

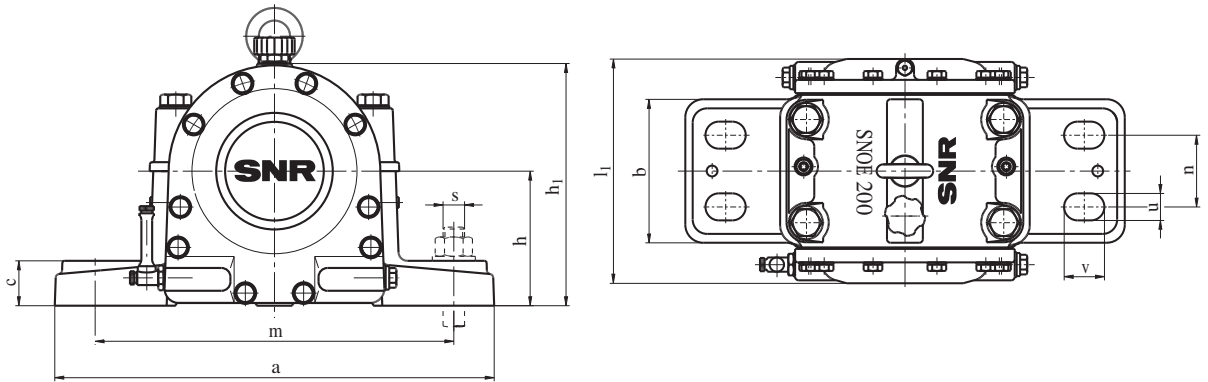
Flange bearing housings, model F 11200 are mounted with self-aligning ball bearings with widened inner ring from the 11200 series. They are mainly used for mountings (e.g. in textile machine manufacturing), where simple handling is required. The housing is sealed using two felt rings. For re-lubrication of the bearing the housing comes with an M10x1 threaded hole. The bearing seat in the housing is manufactured to a tolerance of H8. To prevent any contact between the mating parts and the housing, the inner ring of the self-aligning ball bearings protrudes by 1 mm on the cover side.





Plummer Block Housings SNOE 200

for bearings with cylindrical bore,
specified for oil lubrication



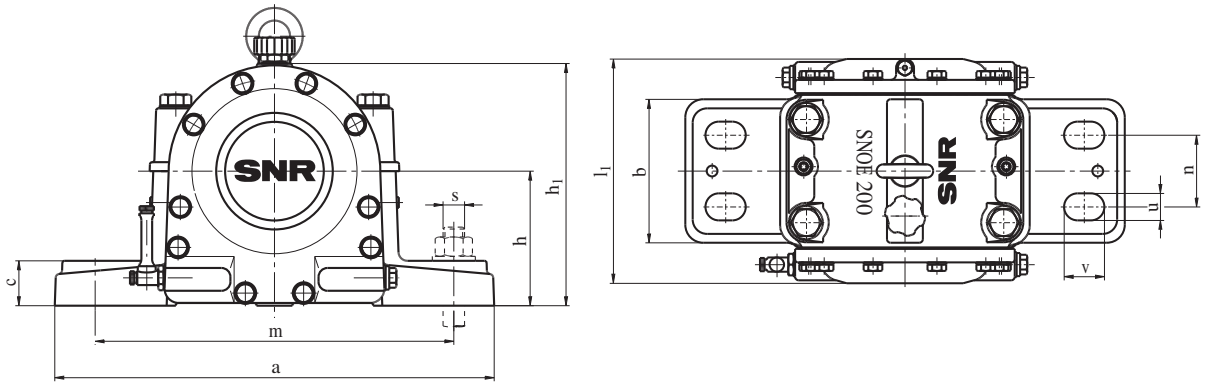
* = Radius of recess according to DIN 509 Form E

d	d ₁	d ₂	d ₃	dimensions [mm]														
				a	b	c	g	g ₁	h	h ₁	l	l ₁	m	n	u	v	s	r* max.
85	90	-	M85x2	410	150	48	62	37	135	240	160	225	340	80	25	35	M20	1,0
		82						-										
90	95	-	M90x2	410	150	48	61	40	135	245	160	225	340	80	25	35	M20	1,0
		87						-										
95	100	-	M95x2	490	160	50	67	42	150	270	170	250	400	80	30	45	M24	1,0
		92						-										
100	110	-	M100x2	490	160	50	60	45	150	270	170	250	400	80	30	45	M24	2,5
		97						-										
110	116	-	M110x2	510	165	50	70	49	165	300	175	250	420	80	30	45	M24	1,6
		107						-										
120	126	-	M120x2	550	165	55	72	52	175	320	175	250	440	80	36	50	M30	1,6
		117						-										
130	136	-	M130x2	570	175	65	77	56	190	345	185	260	460	90	36	50	M30	1,6
		127						-										
140	150	-	M140x2	570	175	65	73	58	190	355	180	260	460	100	36	50	M30	2,5
		137						-										
150	156	-	M150x2	660	190	70	82	64	220	395	200	275	530	100	42	60	M36	1,6
		147						-										
160	170	-	M160x3	660	200	70	80	70	220	400	210	290	530	110	42	60	M36	2,5
		155						-										
170	176	-	M170x3	710	200	85	90	73	260	460	210	300	580	110	42	60	M36	1,6
		165						-										
180	190	-	M180x3	710	200	85	90	75	260	465	210	300	580	110	42	60	M36	2,5
		175						-										
190	196	-	M190x3	820	240	90	95	81	270	485	250	350	670	130	48	70	M42	1,6
		185						-										
200	210	-	M200x3	830	240	90	100	83	280	510	260	360	670	130	48	70	M42	2,5
		195						-										
220	230	-	TR220x4	880	240	105	108	92	310	565	280	380	720	130	48	70	M42	2,5
		212						-										
240	260	-	TR240x4	980	280	120	120	100	340	615	300	400	820	165	48	70	M42	4,0
		235						-										



Plummer Block Housings SNOE 300

for bearings with cylindrical bore,
specified for oil lubrication



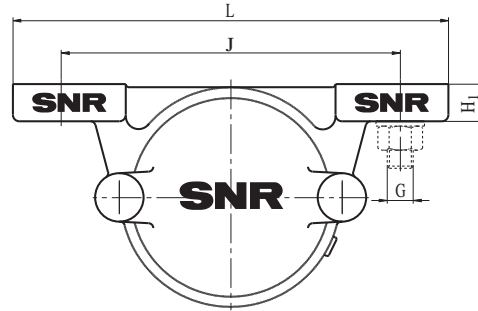
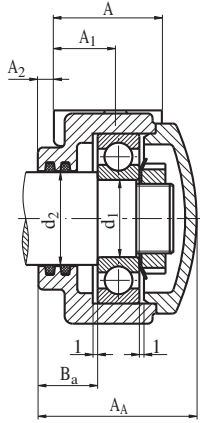
* = Radius of recess according to DIN 509 Form E

d	d ₁	d ₂	d ₃	dimensions [mm]														
				a	b	c	g	g ₁	h	h ₁	l	l ₁	m	n	u	v	s	r* max.
50	55	-	M50x1,5	350	125	40	52	33	115	205	135	210	290	75	20	30	M16	1,0
	47							-										
60	65	-	M60x2	370	130	45	55	37	125	220	140	220	310	80	20	30	M16	1,0
	57							-										
70	75	-	M70x2	410	150	48	62	41	135	240	160	225	340	80	25	35	M20	1,0
	67							-										
80	85	-	M80x2	490	160	50	70	47	150	270	170	235	400	80	30	45	M24	1,0
	77							-										
90	95	-	M90x2	500	165	55	72	51	175	305	175	250	420	80	30	45	M24	1,0
	87							-										
100	106	-	M100x2	550	165	55	72	58	175	320	175	250	440	80	36	50	M30	1,6
	97							-										
110	120	-	M110x2	570	180	65	77	62	180	335	190	270	460	95	36	50	M30	2,5
	107							-										
120	126	-	M120x2	660	200	75	90	66	220	390	210	300	530	110	42	60	M36	1,6
	117							-										
130	140	-	M130x2	660	200	80	86	72	235	420	220	315	530	110	42	60	M36	2,5
	127							-										
140	146	-	M140x2	710	220	85	95	76	260	450	230	325	580	125	42	60	M36	1,6
	137							-										
150	160	-	M150x2	760	200	85	95	82	265	465	240	335	630	125	42	60	M36	2,5
	147							-										
160	166	-	M160x3	820	240	90	100	86	270	485	250	350	670	130	48	70	M42	1,6
	155							-										
170	180	-	M170x3	830	240	90	105	92	280	510	255	350	670	130	48	70	M42	2,5
	165							-										
180	190	-	M180x3	840	240	90	108	95	290	530	260	360	680	130	48	70	M42	2,5
	175							-										



Mine Car Bearing Housings TVN 200

for bearings with cylindrical bore



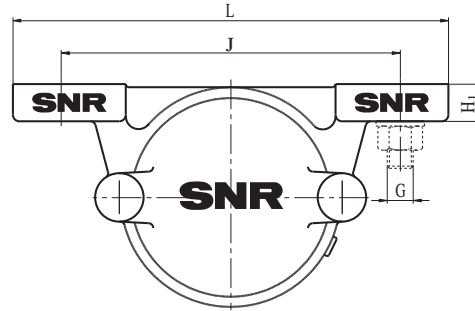
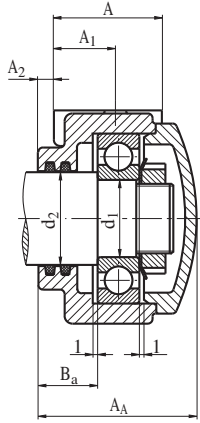
Design A
Housing for shaft ends

shaft		bearing housing		dimensions [mm]								
d ₁	d ₂	code number	A _A	A _B	H	H ₁	J	L	A	A ₁	A ₂	B _a
20	25	TVN 204 A	61		35	14	110	150	45	25	6	23,5
	25	TVN 204 B		68	35	14	110	150	45	25	6	23,5
25	30	TVN 205 A	63		40	16	130	170	45	25	7	24,0
	30	TVN 205 B		71	40	16	130	170	45	25	7	24,0
30	35	TVN 206 A	71		50	16	150	190	52	30	7	27,0
	35	TVN 206 B		76	50	16	150	190	52	30	7	27,0
35	45	TVN 207 A	77		50	18	150	190	52	30	8	28,5
	45	TVN 207 B		78	50	18	150	190	52	30	8	28,5
40	50	TVN 208 A	86		60	18	170	210	60	35	8	33,0
	50	TVN 208 B		92	60	18	170	210	60	35	8	33,0
45	55	TVN 209 A	87		60	20	170	210	60	35	8	32,0
	55	TVN 209 B		92	60	20	170	210	60	35	8	32,0
50	60	TVN 210 A	90		60	20	170	210	60	35	8	34,0
	60	TVN 210 B		94	60	20	170	210	60	35	8	34,0
55	65	TVN 211 A	95		70	23	210	270	70	40	8	34,5
	65	TVN 211 B		100	70	23	210	270	70	40	8	34,5
60	70	TVN 212 A	102		70	23	210	270	70	40	10	39,0
	70	TVN 212 B		105	70	23	210	270	70	40	10	39,0
65	75	TVN 213 A	110		80	25	230	290	80	45	10	40,5
	75	TVN 213 B		115	80	25	230	290	80	45	10	40,5
70	80	TVN 214 A	111		80	25	230	290	80	45	10	40,5
	80	TVN 214 B		115	80	25	230	290	80	45	10	40,5
75	85	TVN 215 A	115		80	25	230	290	80	45	10	41,5
	85	TVN 215 B		117	80	25	230	290	80	45	10	41,5



Mine Car Bearing Housings TVN 300

for bearings with cylindrical bore

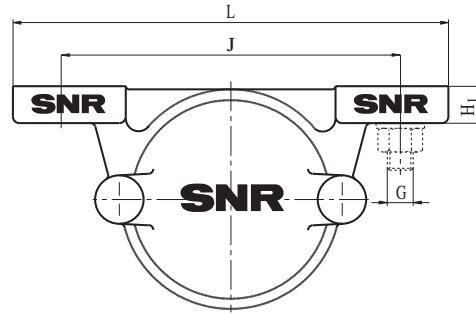
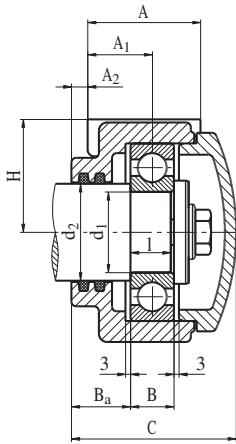


Design A
Housing for shaft ends

shaft		bearing housing code number	dimensions [mm]									
d ₁	d ₂		A _A	A _B	H	H ₁	J	L	A	A ₁	A ₂	B _a
20	25	TVN 304 A	63		40	16	130	170	45	25	7	24,0
	25	TVN 304 B		71	40	16	130	170	45	25	7	24,0
25	30	TVN 305 A	71		50	16	150	190	52	30	7	26,5
	30	TVN 305 B		76	50	16	150	190	52	30	7	26,5
30	40	TVN 306 A	77		50	18	150	190	52	30	8	27,5
	40	TVN 306 B		78	50	18	150	190	52	30	8	27,5
35	45	TVN 307 A	86		60	18	170	210	60	35	8	31,5
	45	TVN 307 B		92	60	18	170	210	60	35	8	31,5
40	50	TVN 308 A	90		60	20	170	210	60	35	8	32,5
	50	TVN 308 B		94	60	20	170	210	60	35	8	32,5
45	55	TVN 309 A	95		70	23	210	270	70	40	8	32,5
	55	TVN 309 B		100	70	23	210	270	70	40	8	32,5
50	60	TVN 310 A	102		70	23	210	270	70	40	10	36,5
	60	TVN 310 B		105	70	23	210	270	70	40	10	36,5
55	65	TVN 311 A	110		80	25	230	290	80	45	10	37,5
	65	TVN 311 B		115	80	25	230	290	80	45	10	37,5
60	70	TVN 312 A	115		80	25	230	290	80	45	10	38,5
	70	TVN 312 B		117	80	25	230	290	80	45	10	38,5
65	75	TVN 313 A	122		95	28	260	330	90	50	12	42,5
	75	TVN 313 B		127	95	28	260	330	90	50	12	42,5
70	80	TVN 314 A	126		95	28	260	330	90	50	12	43,5
	80	TVN 314 B		129	95	28	260	330	90	50	12	43,5
75	85	TVN 315 A	136		100	30	290	360	100	55	13	47,5
	85	TVN 315 B		139	100	30	290	360	100	55	13	47,5



Hardening Car Bearing Housings TVN 6200/6300 for bearing with cylindrical bore, for high temperature applications

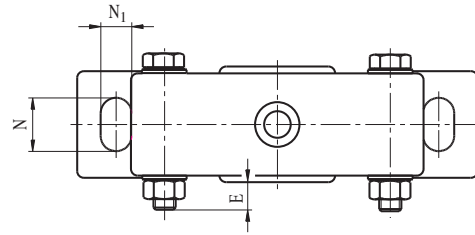
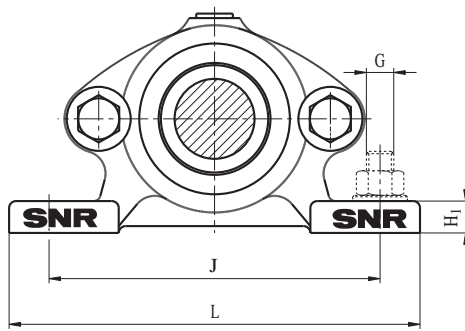


shaft		bearing housing		dimensions [mm]									
d ₁	d ₂	code number	C	H	H ₁	J	L	A	A ₁	A ₂	B	B _a	I
35	40	TVN 6207 A	76	50	18	210	255	57	38,5	10	17	30	15
40	45	TVN 6208 A	81	55	17	210	255	56	39	11	18	30	16
45	55	TVN 6309 A	96	70	18	210	256	55	44	10	25	32,5	23
50	60	TVN 6310 A	102	70	23	210	270	70	50	10	27	36,5	25
55	65	TVN 6211 A	95	70	23	210	270	70	45	8	21	34,5	19
65	75	TVN 6213 A	108,5	80	25	230	290	80	52	10	23	40,5	21



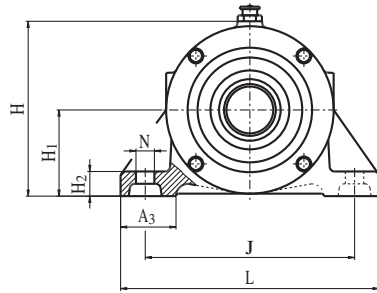
Plummer Block Housings TN200/300

for self-aligning ball bearing with widened inner ring



		dimensions [mm]								
shaft d_1	bearing housing code number	H	J	N_1	N	I	L	A_1	H_1	H_2
20	TN 204	40	115	14	20	40	145	42	12	74
	TN 304	40	120	14	20	44	150	42	12	77
25	TN 205	40	120	14	20	44	150	42	12	77
	TN 305	50	130	14	24	48	165	48	14	93
30	TN 206	50	130	14	24	48	165	48	14	93
	TN 306	50	145	14	24	52	180	48	14	98
35	TN 207	50	145	14	24	52	180	48	14	98
	TN 307	55	160	14	24	56	195	52	16	108
40	TN 208	55	160	14	24	56	195	52	16	108
	TN 308	60	175	14	24	58	210	56	16	120
45	TN 209	60	175	14	24	58	210	56	16	116
	TN 309	65	190	17	27	60	230	62	18	129
50	TN 210	60	175	14	24	58	210	56	16	120
	TN 310	70	205	17	27	62	245	66	18	140
55	TN 211	65	190	17	27	60	230	62	18	129
	TN 212	70	205	17	27	62	245	66	18	140

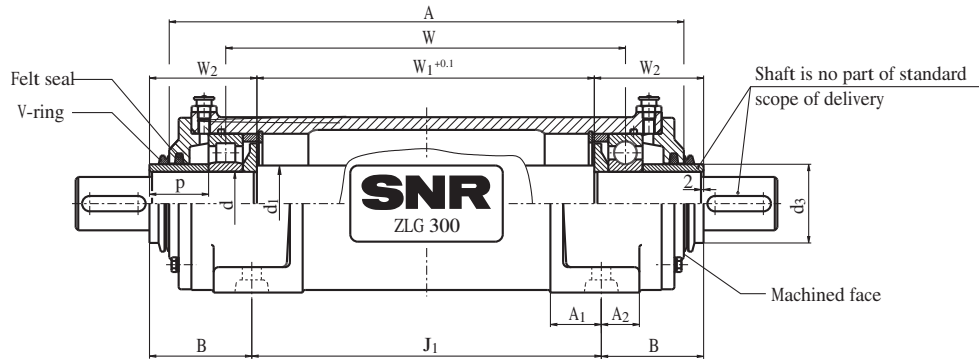
Double Bearing Housings ZLG 300



shaft		bearing housing		dimensions [mm]																
d	d ₁	code number	A	A ₁	A ₂	A ₃	H	H ₁	H ₂	J	J ₁	L	N	W	W ₁	W ₂	B	d ₃		
30	40	ZLG 306	235	30	20	40	100	50	16	130	150	170	15	173,0	140,0	57,0	53,0	-		
														174,5	141,5	-	35			
														174,5	140,5	-	-			
35	45	ZLG 307	275	30	20	40	117	60	16	150	175	190	15	197,0	160,0	66,5	60,0	-		
														198,5	161,5	69,0	62,5	40		
														198,5	160,5	66,5	60,0	-		
40	50	ZLG 308	330	36	26	40	121	60	18	150	225	190	15	257,0	214,0	69,5	65,0	-		
														258,5	215,5	-	50			
														258,5	214,5	-	-			
45	55	ZLG 309	370	36	26	45	139	70	20	170	250	210	15	280,5	235,5	78,5	72,5	-		
														282,5	237,5	-	55			
														282,5	236,5	-	-			
50	60	ZLG 310	405	40	30	45	142	70	20	170	275	210	15	314,5	265,5	81,0	77,5	-		
														316,5	267,5	-	60			
														316,5	266,5	-	-			
55	65	ZLG 311	433	40	30	60	158	80	23	210	300	270	20	336,5	287,5	84,0	79,0	-		
														338,5	289,5	-	65			
														338,5	288,0	-	-			
60	70	ZLG 312	479	40	30	60	162	80	23	210	340	270	20	384,0	333,0	84,0	81,5	-		
														385,5	334,5	87,5	85,0	70		
														385,5	333,0	84,0	81,5	-		
65	75	ZLG 313	503	45	35	60	187	95	25	230	360	290	20	402,0	348,0	88,0	83,5	-		
														404,5	350,5	91,5	87,0	75		
														404,5	349,0	88,0	83,5	-		



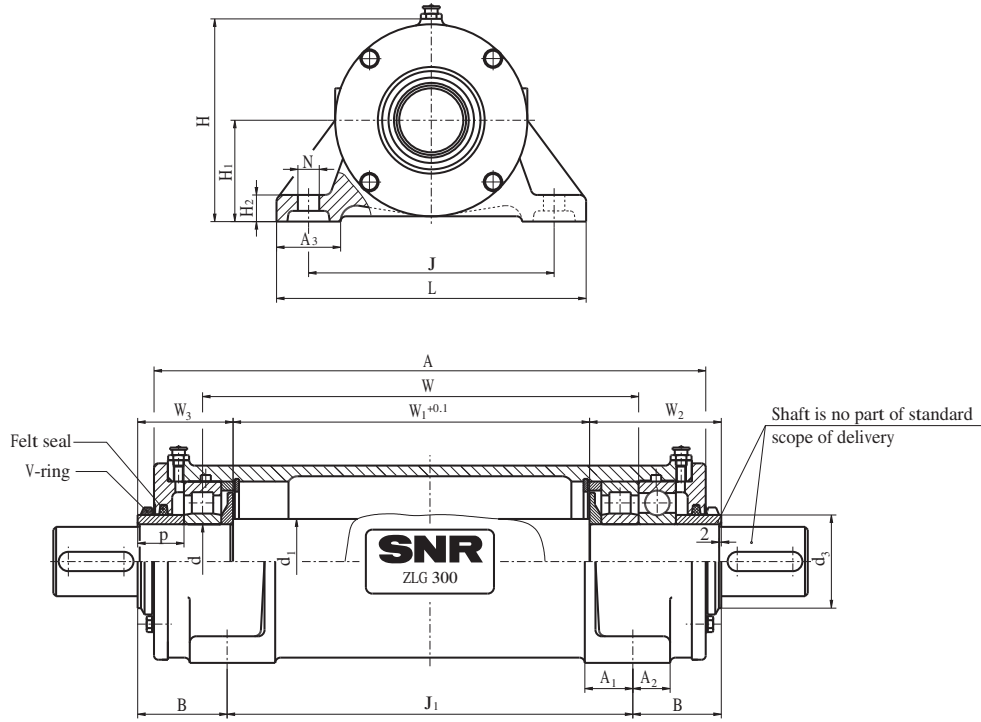
Double Bearing Housings ZLG 300



Design AB

shaft		bearing housing		dimensions [mm]																
d	d ₁	code number	A	A ₁	A ₂	A ₃	H	H ₁	H ₂	J	J ₁	L	N	W	W ₁	W ₂	B	d ₃		
70	80	ZLG 314	534	45	35	60	190	95	25	230	380	290	20	421,0	364,0	99,0	92,5	-		
														423,5	366,5			80		
														423,5	365,0			-		
75	90	ZLG 315	559	45	35	70	200	100	28	260	400	330	20	450,0	389,0	99,0	95,0	-		
														452,5	391,5			90		
														452,5	390,0			-		
80	95	ZLG 316	585	50	40	70	220	112	30	260	420	330	20	468,0	405,0	104,0	98,0	-		
														470,5	407,5			95		
														470,5	406,0			-		
85	100	ZLG 317	593	50	40	70	225	112	30	290	440	350	20	478,0	415,0	103,0	92,0	-		
														480,5	417,5			100		
														480,5	416,0			-		
90	105	ZLG 318	605	55	45	70	230	112	30	290	460	350	20	483,5	418,5	107,0	88,0	-		
														486,5	421,5			110		
														486,5	420,0			110		
95	110	ZLG 319	633	60	50	90	248	125	35	320	480	400	24	508,5	440,5	110,5	92,0	-		
														511,5	443,5			110		
														511,5	442,0			110		
100	115	ZLG 320	673	60	50	80	264	130	40	320	500	400	24	533,0	463,0	118,5	102,0	-		
														536,5	466,5			120		
														536,5	465,0			120		
110	130	ZLG 322	678	70	60	100	296	150	40	380	520	450	26	577,0	504,0	102,5	96,5	-		
														580,5	507,5			130		
														580,5	506,0			-		
120	140	ZLG 324	705	78	60	115	320	160	40	410	540	500	35	599,5	521,5	107,5	100,0	-		
														602,5	524,5			140		
														602,5	523,0			-		

Triple Bearing Housings DLG 300

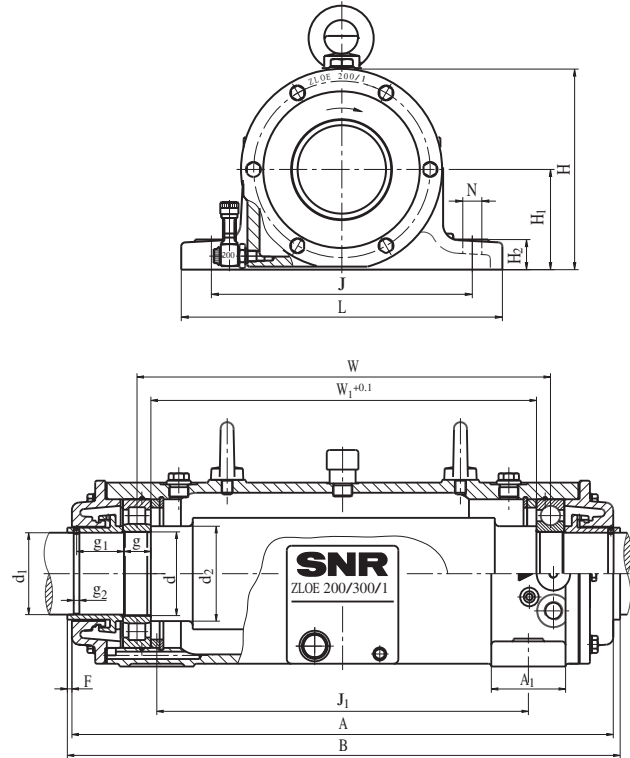


Design AD

shaft bearing housing		dimensions [mm]																			
d	d ₁	code number	A	A ₁	A ₂	A ₃	H	H ₁	H ₂	J	J ₁	L	N	W	W ₁	W ₂	W ₃	B	d ₃	p	as
70	80	DLG 314 517	45	35	60	190	95	25	230	380	290	20	408,5	334,0	124,0	89,0	83,5	80	43,0	-	-
													408,5	334,0	89,0	-	-				
													406,0	331,5	91,5	2,5	-				
75	90	DLG 315 553	45	35	70	200	100	28	260	400	330	20	438,5	359,0	130,5	93,5	91,5	90	44,5	-	-
													438,5	359,0	93,5	-	-				
													436,0	356,5	96,0	2,5	-				
80	95	DLG 316 577	50	40	70	220	112	30	260	420	330	20	460,0	377,5	134,5	95,5	94,0	95	44,5	-	-
													460,0	377,5	95,5	-	-				
													457,5	375,0	98,0	2,5	-				
85	100	DLG 317 593	50	40	70	225	112	30	290	440	350	20	469,0	385,5	139,5	98,5	92,0	100	46,5	-	-
													469,0	385,5	98,5	-	-				
													466,5	383,0	101,0	2,5	-				
90	105	DLG 318 599	55	45	70	230	112	30	290	460	350	20	474,0	387,5	144,5	101,5	87,0	110	47,5	-	-
													474,0	387,5	101,5	-	-				
													471,0	384,5	104,5	3,0	-				
95	110	DLG 319 626	60	50	90	248	125	35	320	480	400	24	498,0	407,5	149,0	104,0	90,5	110	47,5	-	-
													498,0	407,5	104,0	-	-				
													495,0	404,5	107,0	3,0	-				
100	115	DLG 320 657	60	50	80	264	130	40	320	500	400	24	525,5	432,0	153,0	106,0	95,5	120	47,5	-	-
													525,5	432,0	106,0	-	-				
													522,0	428,5	109,5	3,5	-				
110	130	DLG 322 678	70	60	100	296	150	40	380	520	450	26	555,5	457,5	152,5	102,5	96,5	130	41,0	-	-
													555,5	457,5	102,5	-	-				
													552,0	454,0	106,0	3,5	-				
120	140	DLG 324 705	78	60	115	320	160	40	410	540	500	35	575,0	469,5	162,5	107,5	100,0	140	41,0	-	-
													575,0	469,5	107,5	-	-				
													572,0	466,5	110,5	3,0	-				



Double Bearing Housings ZLOE 200/300 for cylindrical roller bearings and deep groove ball bearings, specified for oil lubrication



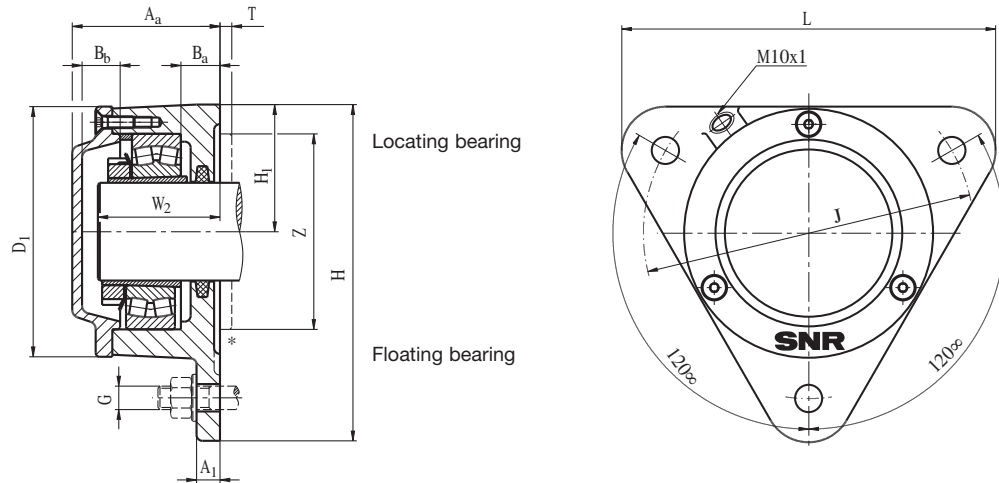
Design B

shaft		bearing housing		dimensions [mm]												
d	d ₁	d ₂	code number	A	A ₁	B	F	H	H ₁	H ₂	J	J ₁	L	N	W	W ₁
90	88	102	ZLOE 218/1	582,5	80	595,0	5	200	100	30	260	400	320	19	445,0	415,0
95	93	110	ZLOE 219/1	645,0	80	657,5	5	227	112	30	290	440	350	19	493,5	461,5
100	98	115	ZLOE 220/1	645,0	80	657,5	5	227	112	30	290	440	350	19	491,5	457,5
110	108	122	ZLOE 222/1	688,5	90	715,5	12	254	125	36	320	480	400	24	536,5	498,5
75	72	90	ZLOE 315/1	582,5	80	595,0	5	200	100	30	260	400	320	19	445,0	408,0
85	82	100	ZLOE 317/1	645,0	80	657,5	5	227	112	30	290	440	350	19	491,5	450,5
95	92	110	ZLOE 319/1	688,5	90	715,5	12	254	125	36	320	480	400	24	536,5	491,5

This bearing housing can be equipped with a combination of three bearings.
Please contact SNR for more informations.

Flange Bearing Housings 722500

for bearings with adapter sleeve fastening



Design A
Housing design for shaft ends

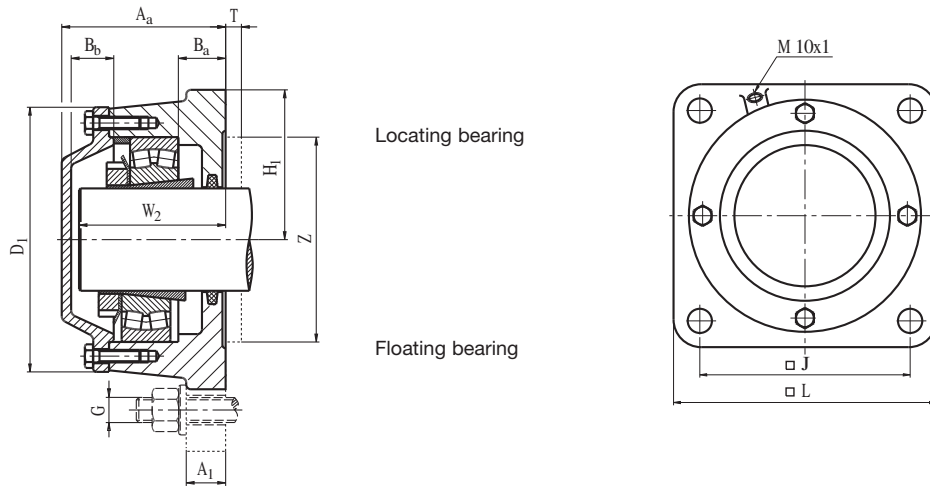
shaft d	bearing housing code number	dimensions [mm]												
		A _a	A _b	A ₁	B _a	B _b	D ₁	H	H ₁	J	L	W ₂	T*	Z*
20	722505 DA	51,5	56,5	10	15	12,5	75	100	38	96	110	44	6	65
	722505 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
25	722506 DA	57,0	59,5	12	16	15	86	117	44	116	130	47	6	70
	722506 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
30	722507 DA	59,5	63,5	12	16	14,5	97	130	48,5	130	145	51	6	75
	722507 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
35	722508 DA	64,0	65,5	12	17	18	108	143	54	140	160	53	6	80
	722508 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
40	722509 DA	64,5	69,5	12	19	16,5	113	160	60	160	180	56	6	85
	722509 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
45	722510 DA	68,5	73	12	22	17,5	118	160	60	160	180	60	6	90
	722510 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
50	722511 DA	75,5	81,5	12	24	19,5	128	172	65	170	192	64	6	100
	722511 DB	-	-	-	-	-	-	-	-	-	-	-	-	-
55	722512 DA	77,0	82	12	23	19	142	189	72	180	210	66	10	110
	722512 DB	-	-	-	-	-	-	-	-	-	-	-	-	-

* Housings are also available with centring on the mating surface.



Flange Bearing Housings 722500

for bearings with adapter sleeve fastening



Design A
Housing design for shaft ends

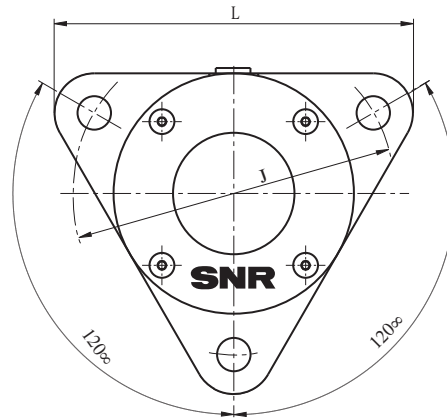
shaft d	bearing housing code number	dimensions [mm]												
		A _a	A _b	A ₁	B _a	B _b	D ₁	H	H ₁	J	L	W ₂	T*	Z*
60	722513 DA	80	86	15	22	20	152	203	78	190	225	69	10	120
	722513 DB					-						-		
65	722515 A	104	104	25	30	27	168	-	95	152	190	86	10	130
	722515 B					-						-		
70	722516 A	110	110	25	31	30	176	-	98	152	196	92	10	130
	722516 B					-						-		
75	722517 A	114	114	25	31	30	188	-	105	170	210	96	10	140
	722517 B					-						-		
80	722518 A	118	118	25	30	34	198	-	105	170	210	99	10	150
	722518 B					-						-		
90	722520 A	127	127	30	30	35	224	-	125	198	250	107	10	170
	722520 B					-						-		
100	722522 A	137	137	30	30	38	246	-	135	219	270	115	10	200
	722522 B					-						-		

* Housings are also available with centring on the mating surface.



Flange Bearing Housings F 11200

for self-aligning ball bearings with widened inner ring

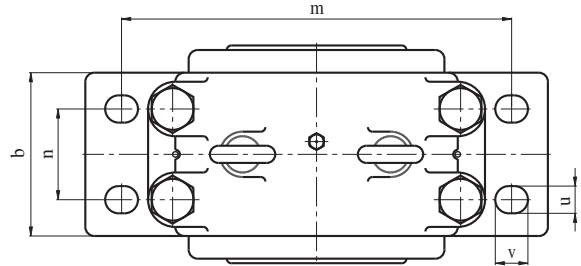
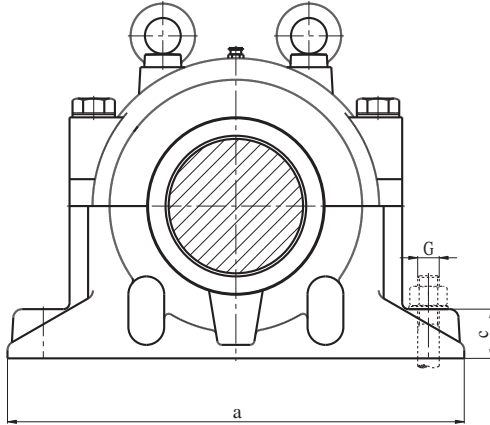


shaft d_1	bearing housing code number	dimensions [mm]							
		A	A_1	D_a	D_1	H	H_1	J	L
20	F 11204	42	10	29,2	67	93	35,0	90	105
25	F 11205	46	10	33,3	73	100	38,0	96	110
30	F 11206	50	12	40,1	84	117	44,0	116	130
35	F 11207	54	12	47,7	95	130	48,5	130	145
40	F 11208	60	12	54,0	105	143	54,0	140	160
45	F 11209	62	15	57,7	115	160	60,0	160	180
50	F 11210	63	15	62,7	115	160	60,0	160	180



Plummer Block Housings SD 3100 TS

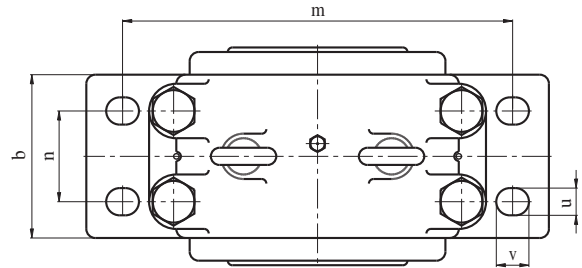
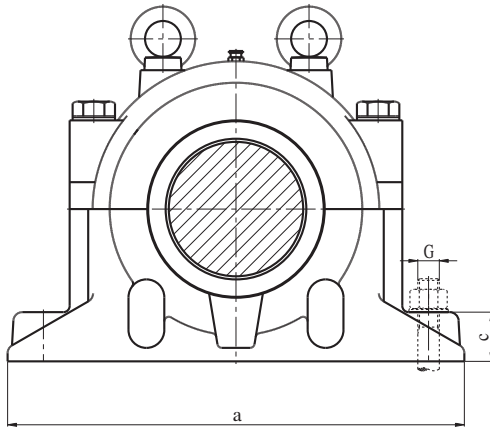
for bearing with adapter sleeve fastening



shaft d	bearing housing code number	dimensions [mm]												
		a	b	c	e	f	h	h ₁	l	l ₁	m	n	u	v
150	SD 3134 TSA	510	180	70	14	14	170	335	230	-	430	100	30	36
	SD 3134 TSB									232				
160	SD 3136 TSA	530	190	75	15	15	180	355	240	-	450	110	30	42
	SD 3136 TSB									242				
170	SD 3138 TSA	560	210	80	10	10	190	375	260	-	480	120	30	42
	SD 3138 TSB									362				
180	SD 3140 TSA	610	230	85	10	10	210	410	280	-	510	130	37	51
	SD 3140 TSB									282				
200	SD 3144 TSAF	640	240	90	12	12	220	435	290	-	540	140	37	51
	SD 3144 TSAL									-				
	SD 3144 TSBF									292				
	SD 3144 TSBL									292				
220	SD 3148 TSAF	700	260	95	12	12	240	475	310	-	600	150	37	51
	SD 3148 TSAL									-				
	SD 3148 TSBF									312				
	SD 3148 TSBL									312				
240	SD 3152 TSAF	770	280	100	13	13	260	515	320	-	650	160	43	60
	SD 3152 TSAL									-				
	SD 3152 TSBF									322				
	SD 3152 TSBL									322				
260	SD 3156 TSAF	790	280	105	16	16	280	550	320	-	670	160	43	60
	SD 3156 TSAL									-				
	SD 3156 TSBF									322				
	SD 3156 TSBL									322				
280	SD 3160 TSAF	830	310	110	22	22	300	590	350	-	710	190	43	60
	SD 3160 TSAL									-				
	SD 3160 TSBF									352				
	SD 3160 TSBL									352				

Plummer Block Housings SD 3100 TS

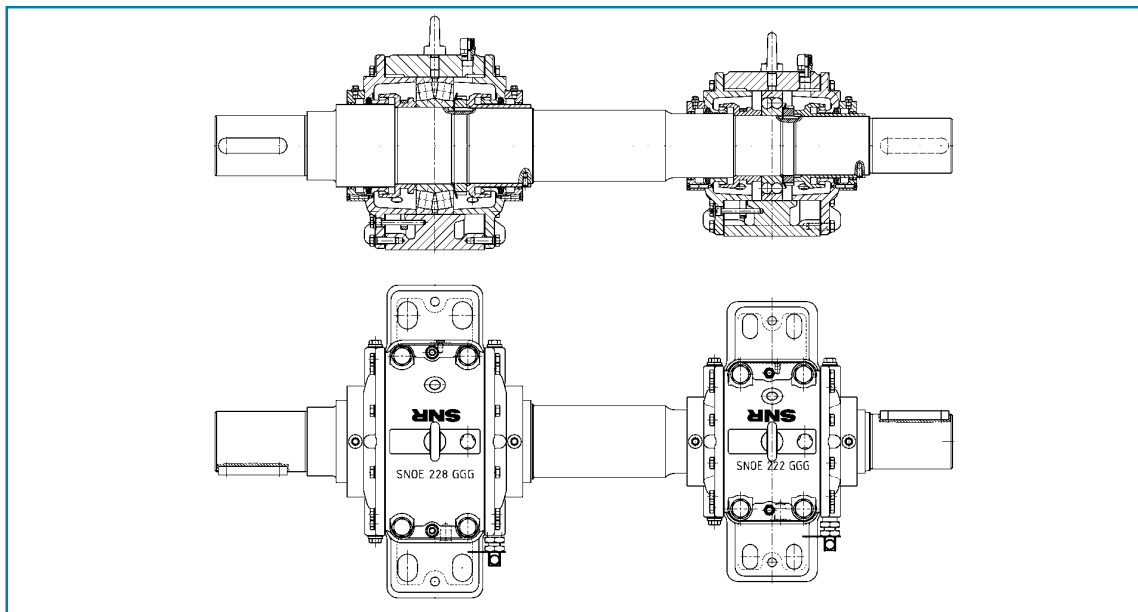
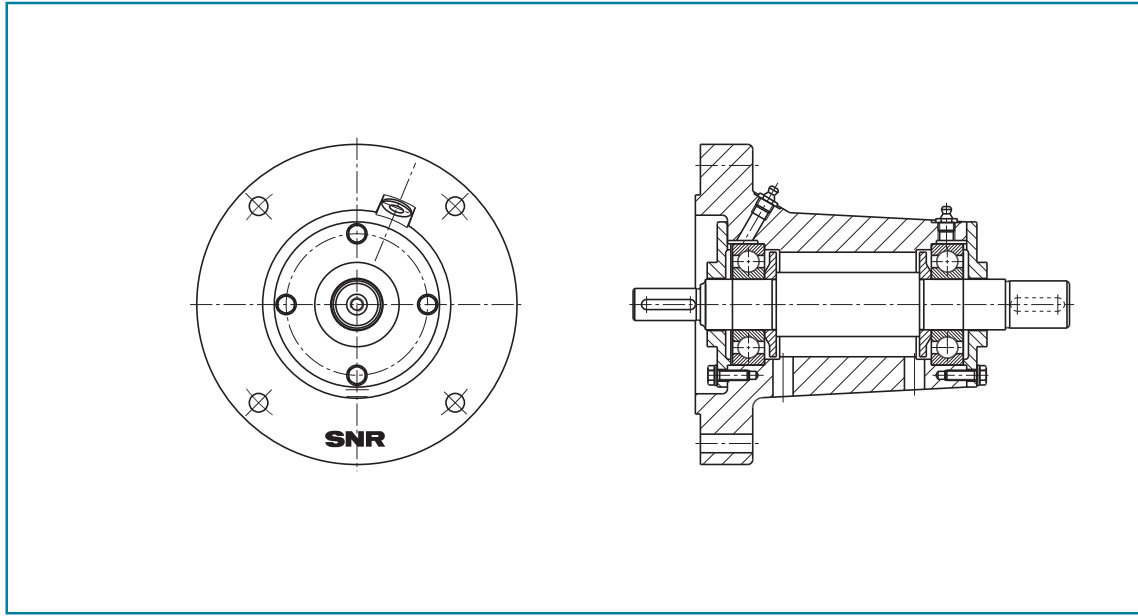
for bearing with adapter sleeve fastening



		dimensions [mm]													
shaft d	bearing housing code number	a	b	c	e	f	h	h ₁	l	l ₁	m	n	u	v	
300	SD 3164 TSAF	880	330	115	23	23	320	630	370	-	750	200	43	60	
	SD 3164 TSAL									-					
	SD 3164 TSBF									372					
	SD 3164 TSBL									372					
320	SD 3168 TSAF	950	360	120	24	24	340	675	400	-	810	220	43	62	
	SD 3168 TSAL									-					
	SD 3168 TSBF									402					
	SD 3168 TSBL									402					
340	SD 3172 TSAF	1000	360	120	30	30	350	695	400	-	840	220	43	62	
	SD 3172 TSAL									-					
	SD 3172 TSBF									402					
	SD 3172 TSBL									402					
360	SD 3176 TSAF	1040	360	120	30	30	360	715	400	-	870	220	43	62	
	SD 3176 TSAL									-					
	SD 3176 TSBF									402					
	SD 3176 TSBL									402					
380	SD 3180 TSAF	1120	390	125	30	30	380	755	430	-	950	240	50	70	
	SD 3180 TSAL									-					
	SD 3180 TSBF									432					
	SD 3180 TSBL									432					
400	SD 3184 TSAF	1170	420	130	35	35	410	810	460	-	1000	260	50	70	
	SD 3184 TSAL									-					
	SD 3184 TSBF									462					
	SD 3184 TSBL									462					

Bearing Housings

Special solutions



As you can see the SNR service not only extends to bearing design, but also on complete bearing units, i.e. completed housings with shafts mounted by us!



SNR : BEARING HOUSINGS

There is a great variety of bearing housing applications in the field of machine- and plant engineering. In most cases technical requirements and environmental conditions influence the design of the housing, the choice of the bearing and specification of the sealing system. The wide assortment of SNR bearing housings offers always an adequate and efficient solution for the installation in your machinery.

