SOFN 200 Series Bearing Housings

PRODUCT OVERVIEW

The SOFN 200 Series is a range of oil ring lubricated split bearing housings designed for spherical roller bearings in high-speed, high-temperature applications. The housings are commonly used on industrial fans, flywheels, power generation equipment, cement processing machinery, and other heavy-duty industrial installations.

Available for shaft diameters from 49 mm to 240 mm, the SOFN 200 Series can be supplied for both locating and non-locating bearing arrangements, with optional end covers for blank shaft applications. Additional machining can be provided for condition monitoring equipment, including vibration monitoring devices, shock pulse sensors and temperature probes.

For high-temperature environments, optional water-cooling pipework can be incorporated within the housing sump to assist with temperature control and prolong bearing life. Bri-Mac can also manufacture larger sizes and bespoke configurations to suit specific application requirements.

SEALING ARRANGEMENTS

The SOFN 200 Series is supplied as standard with labyrinth seals. Special seal arrangements can be discussed to suit individual application requirements and operating conditions.

LIFTING & HANDLING

Larger housing sizes are supplied with lifting eyebolts to support safe handling, transportation, installation and maintenance.

MATERIALS

The SOFN 200 Series is available in:

- SOFN – Grey cast iron
- SOFN**S** – Cast steel
- SOFN**T** – Flame-cut steel
- SOFN**D** – Spheroidal graphite (ductile) iron

While grey cast iron remains the traditional choice for many applications, cast steel and ductile iron versions are available where increased strength and impact resistance are required.



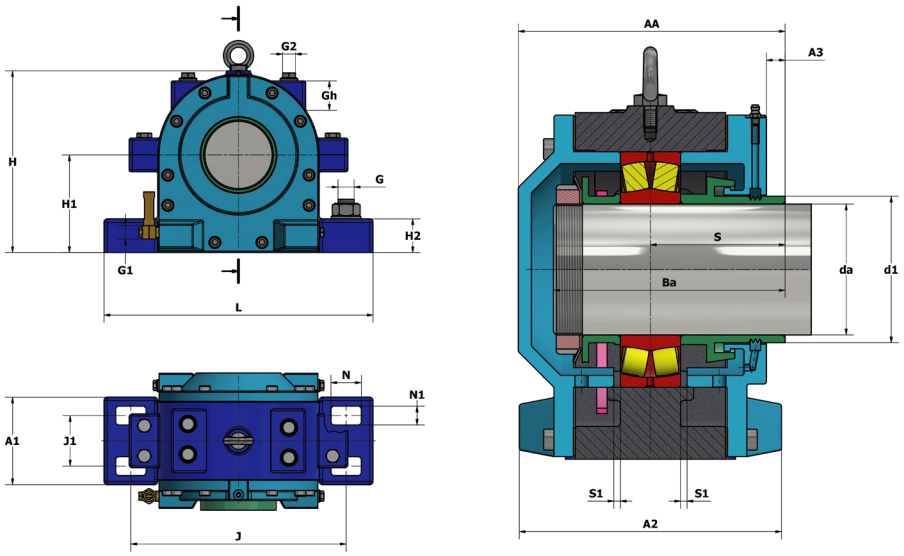
SUPPLEMENTARY DESIGNATIONS

DESIGNATION	DESCRIPTION
Standard	Bearing on adapter sleeve for plain cylindrical shaft
C	Bearing on adapter sleeve for stepped shaft
D	Bearing on withdrawal sleeve for stepped shaft
G	Bearing on stepped shaft with felt and labyrinth seals
H	Bearing on stepped shaft with felt seal, prepared for supplementary V-ring seal
A	Blank shaft housing (with end cover)
B	Through shaft housing
L	Non-locating (free) bearing arrangement
F	Locating (fixed) bearing arrangement
P	Cross-location arrangement
V	Housing supplied with grease escape hole
D	Housing for bearings with cylindrical bore (444 series only)
TS	Housing fitted with labyrinth seals
TAC	Housing fitted with taconite seals

HOUSING CONFIGURATIONS

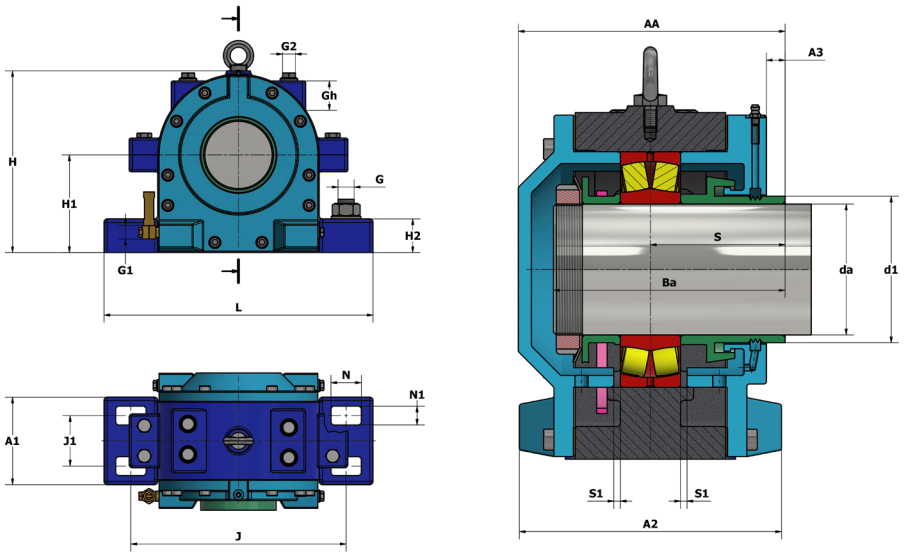
- **AL** Blank shaft (with end cover), non-locating bearing.
- **AF** Blank shaft (with end cover), locating bearing.
- **BL** Through shaft, non-locating bearing.
- **BF** Through shaft, locating bearing.

SOFN 200 Series Bearing Housings (Blank)



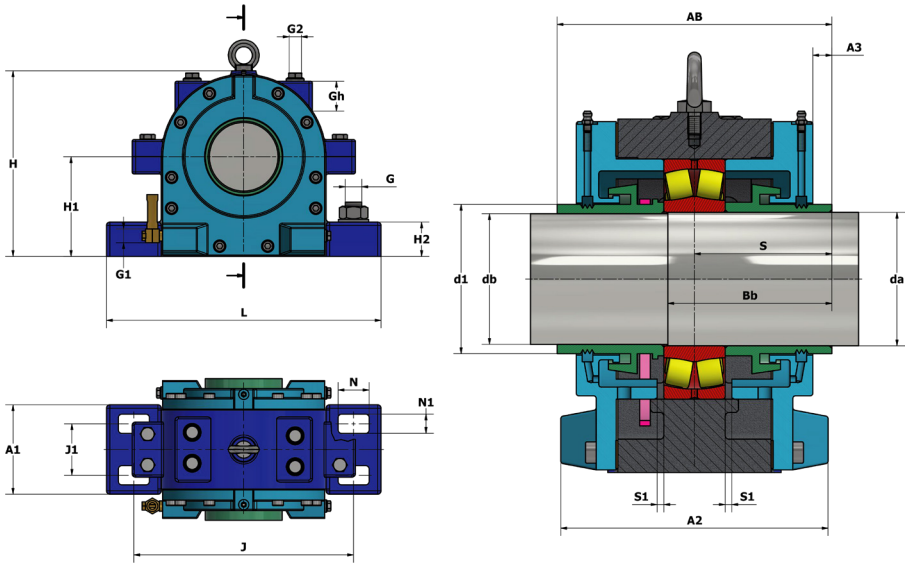
Bri-Mac Part No	Shaft Dia		Dimensions (mm)																					Bearing No.
	da	db	d1	AA	AB	A1	A2	A3	H	H1	H2	J	J1	L	N	N1	S	S1	G	G1	G2	Gh	Ba	Bb	
SOFN 310	50	49	58	142.5	150	92	145	7.5	168	95	30	210	50	270	30	19	75	3	M16	R1/4	R3/8	27	128	92	22310 CC
SOFN 311	55	53	65	147.5	155	95	148	7.5	180	100	30	233	50	290	33	19	77.5	3	M16	R1/4	R3/8	27	134	96	22311 CC
SOFN 212	60	58	70	142.5	150	92	145	7.5	168	95	30	210	50	270	30	19	75	3	M16	R1/4	R3/8	27	128	86	22212 CC
SOFN 312	60	58	70	162.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	147	105	22312 CC
SOFN 213	65	63	75	147.5	155	95	148	7.5	180	100	30	233	50	290	34	19	77.5	3	M16	R1/4	R3/8	27	134	90	22213 CC
SOFN 313	65	63	75	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	3	M20	R1/4	R3/8	27	153	110.5	22313 CC
SOFN 214	70	68	80	162.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	136	98	22214 CC
SOFN 314	70	68	80	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	126	112	22314 CC
SOFN 215	75	73	85	172.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	145	98	22215 CC
SOFN 315	75	73	85	180	190	120	190	10	245	135	45	290	70	360	40	24	95	5	M20	R1/2	R3/8	27	161	119.5	22315 CC
SOFN 216	80	78	95	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	149	103	22216 CC
SOFN 316	80	78	95	199	214	135	210	15	255	140	40	290	80	360	40	24	107	5	M20	R1/2	R3/8	27	181	133	22316 CC
SOFN 217	85	83	96	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	150	105	22217 CC
SOFN 317	85	83	96	206	206	130	205	10	270	145	50	320	75	400	45	28	103	5	M24	R1/2	R1/2	27	188	130	22317 CC
SOFN 218	90	88	100	180	190	120	190	10	245	135	45	290	70	360	40	24	95	5	M20	R1/2	R3/8	27	161	112	22218 CC
SOFN 318	90	88	104	225	240	165	246	15	280	155	50	317	95	400	45	28	120	5	M24	R1/2	R1/2	32	198	148	22318 CC
SOFN 219	95	93	105	192	200	135	210	8	255	140	40	290	80	360	40	24	100	5	M20	R1/2	R3/8	27	171	118	22219 CC
SOFN 319	95	93	105	240	224	145	216	13	290	160	50	347	75	420	45	28	114.5	5	M24	R1/2	R1/2	27	211	145	22319 CC
SOFN 220	100	98	110	196	206	130	205	10	270	145	50	320	75	400	45	28	103	5	M24	R1/2	R3/8	27	177	123	22220 CC
SOFN 320	100	98	115	255	270	170	245	15	315	170	55	347	90	420	45	28	135	8	M24	R1/2	R1/2	27	226	168	22320 CC

SOFN 200 Series Bearing Housings (Blank)



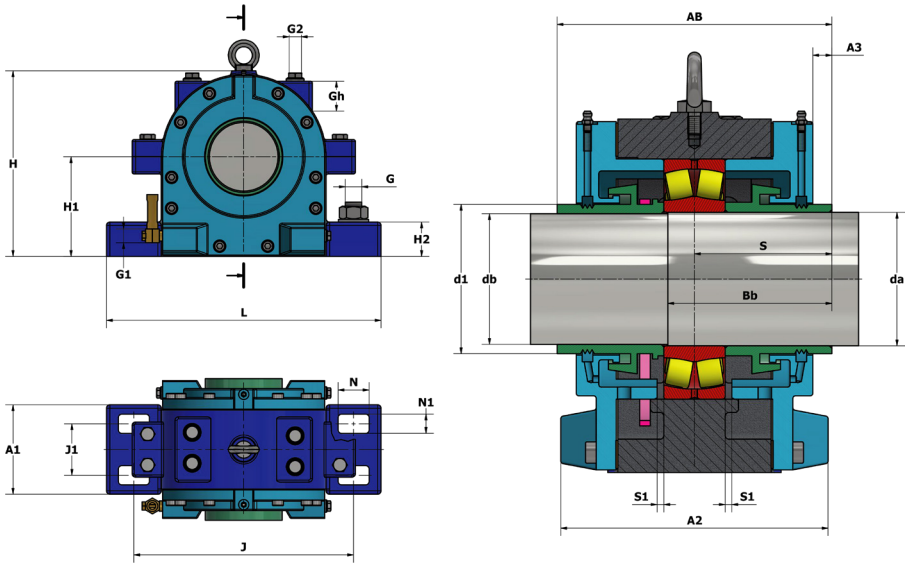
Bri-Mac Part No	Shaft Dia		Dimensions (mm)																					Bearing No.
	da	db	d1	AA	AB	A1	A2	A3	H	H1	H2	J	J1	L	N	N1	S	S1	G	G1	G2	Gh	Ba	Bb	
SOFN 222	110	108	120	216	229	145	216	13	290	160	50	347	75	420	45	28	114.5	5	M24	R1/2	R1/2	27	192	138	22222 CC
SOFN 322	110	108	130	270	290	190	265	20	355	190	65	415	100	500	45	35	145	8	M30	R1/2	R3/4	33	243	180	22322 CC
SOFN 224	120	118	135	258	276	170	245	18	315	170	55	347	90	420	45	28	138	8	M24	R1/2	R1/2	27	225	164	22224 CC
SOFN 324	120	118	140	285.5	306	190	265	20.5	375	200	65	450	115	540	50	35	153	8	M30	R1/2	R3/4	44	254	192	22324 CC
SOFN 226	130	128	145	255	270	180	260	15	335	180	60	377	100	450	45	28	135	8	M24	R1/2	R1/2	32	226	164	22226 CC
SOFN 326	130	128	150	300	320	205	285	20	405	215	65	470	120	560	50	35	160	8	M30	R1/2	R3/4	38	265	202	22326 CC
SOFN 228	140	138	160	265	280	190	265	15	355	190	65	415	100	500	45	35	140	8	M30	R1/2	R3/4	33	234	170	22228 CC
SOFN 328	140	138	165	320	340	220	300	20	425	230	80	510	120	630	60	35	170	8	M30	R1/2	R3/4	42	287	215	22328 CC
SOFN 230	150	148	170	265	280	190	265	15	375	200	65	450	115	540	50	35	140	8	M30	R1/2	R3/4	44	239	173	22230 CC
SOFN 330	150	148	175	335	350	240	320	15	455	245	75	545	150	650	65	35	175	10	M30	R1/2	R3/4	44	292	225	22330 CC
SOFN 232	160	158	178	298	316	205	280	18	405	215	65	470	120	560	50	35	158	10	M30	R1/2	R3/4	38	266	193	22232 CC
SOFN 332	160	158	190	350	370	250	335	20	480	260	85	590	150	720	70	42	185	10	M36	R1/2	R3/4	50	315	240	22332 CC
SOFN 234	170	168	195	330	350	230	310	20	440	235	70	515	130	610	55	35	175	10	M30	R1/2	R3/4	46	290	213	22234 CC
SOFN 334	170	168	197	358	378	260	350	20	510	275	85	600	160	730	70	42	189	12	M36	R1/2	R3/4	44	321	244	22334 CC
SOFN 236	180	178	205	340	360	240	320	20	455	245	75	545	150	650	65	35	180	10	M30	R1/2	R3/4	44	296	218	22236 CC
SOFN 336	180	178	210	384.5	404	280	370	19.5	565	305	95	670	180	820	80	42	202	12	M36	R1/2	R3/4	48	342	260	22336 CC
SOFN 238	190	188	220	350	370	250	335	20	480	260	85	590	150	720	70	42	185	12	M36	R1/ 2	R3/4	50	317	226	22238 CC
SOFN 240	200	198	227	358	378	260	350	20	510	275	85	600	160	730	70	42	189	12	M36	R1/ 2	R3/4	44	315	233	22240 CC
SOFN 244	220	218	255	384.5	404	280	370	19.5	565	305	95	670	180	820	80	42	202	12	M36	R1/ 2	R3/4	48	342	251	22244 CC
SOFN248	240	238	270	400	420	290	380	20	625	340	100	740	190	900	80	42	210	12	M36	R1/ 2	R3/4	56	360	266	22248 CC

SOFN 200 Series Bearing Housings (Through)



Bri-Mac Part No	Shaft Dia		Dimensions (mm)																					Bearing No.
	da	db	d1	AA	AB	A1	A2	A3	H	H1	H2	J	J1	L	N	N1	S	S1	G	G1	G2	Gh	Ba	Bb	
SOFN 310	50	49	58	142.5	150	92	145	7.5	168	95	30	210	50	270	30	19	75	3	M16	R1/4	R3/8	27	128	92	22310 CC
SOFN 311	55	53	65	147.5	155	95	148	7.5	180	100	30	233	50	290	33	19	77.5	3	M16	R1/4	R3/8	27	134	96	22311 CC
SOFN 212	60	58	70	142.5	150	92	145	7.5	168	95	30	210	50	270	30	19	75	3	M16	R1/4	R3/8	27	128	86	22212 CC
SOFN 312	60	58	70	162.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	147	105	22312 CC
SOFN 213	65	63	75	147.5	155	95	148	7.5	180	100	30	233	50	290	34	19	77.5	3	M16	R1/4	R3/8	27	134	90	22213 CC
SOFN 313	65	63	75	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	3	M20	R1/4	R3/8	27	153	110.5	22313 CC
SOFN 214	70	68	80	162.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	136	98	22214 CC
SOFN 314	70	68	80	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	126	112	22314 CC
SOFN 215	75	73	85	172.5	170	100	152	7.5	198	110	30	230	55	290	34	19	85	5	M16	R1/4	R3/8	27	145	98	22215 CC
SOFN 315	75	73	85	180	190	120	190	10	245	135	45	290	70	360	40	24	95	5	M20	R1/2	R3/8	27	161	119.5	22315 CC
SOFN 216	80	78	95	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	149	103	22216 CC
SOFN 316	80	78	95	199	214	135	210	15	255	140	40	290	80	360	40	24	107	5	M20	R1/2	R3/8	27	181	133	22316 CC
SOFN 217	85	83	96	172.5	180	110	182	7.5	230	125	35	260	60	330	40	24	90	5	M20	R1/2	R3/8	27	150	105	22217 CC
SOFN 317	85	83	96	206	206	130	205	10	270	145	50	320	75	400	45	28	103	5	M24	R1/2	R1/2	27	188	130	22317 CC
SOFN 218	90	88	100	180	190	120	190	10	245	135	45	290	70	360	40	24	95	5	M20	R1/2	R3/8	27	161	112	22218 CC
SOFN 318	90	88	104	225	240	165	246	15	280	155	50	317	95	400	45	28	120	5	M24	R1/2	R1/2	32	198	148	22318 CC
SOFN 219	95	93	105	192	200	135	210	8	255	140	40	290	80	360	40	24	100	5	M20	R1/2	R3/8	27	171	118	22219 CC
SOFN 319	95	93	105	240	224	145	216	13	290	160	50	347	75	420	45	28	114.5	5	M24	R1/2	R1/2	27	211	145	22319 CC
SOFN 220	100	98	110	196	206	130	205	10	270	145	50	320	75	400	45	28	103	5	M24	R1/2	R3/8	27	177	123	22220 CC
SOFN 320	100	98	115	255	270	170	245	15	315	170	55	347	90	420	45	28	135	8	M24	R1/2	R1/2	27	226	168	22320 CC

SOFN 200 Series Bearing Housings (Through)



Bri-Mac Part No	Shaft Dia		Dimensions (mm)																						Bearing No.
	da	db	d1	AA	AB	A1	A2	A3	H	H1	H2	J	J1	L	N	N1	S	S1	G	G1	G2	Gh	Ba	Bb	
SOFN 222	110	108	120	216	229	145	216	13	290	160	50	347	75	420	45	28	114.5	5	M24	R1/2	R1/2	27	192	138	22222 CC
SOFN 322	110	108	130	270	290	190	265	20	355	190	65	415	100	500	45	35	145	8	M30	R1/2	R3/4	33	243	180	22322 CC
SOFN 224	120	118	135	258	276	170	245	18	315	170	55	347	90	420	45	28	138	8	M24	R1/2	R1/2	27	225	164	22224 CC
SOFN 324	120	118	140	285.5	306	190	265	20.5	375	200	65	450	115	540	50	35	153	8	M30	R1/2	R3/4	44	254	192	22324 CC
SOFN 226	130	128	145	255	270	180	260	15	335	180	60	377	100	450	45	28	135	8	M24	R1/2	R1/2	32	226	164	22226 CC
SOFN 326	130	128	150	300	320	205	285	20	405	215	65	470	120	560	50	35	160	8	M30	R1/2	R3/4	38	265	202	22326 CC
SOFN 228	140	138	160	265	280	190	265	15	355	190	65	415	100	500	45	35	140	8	M30	R1/2	R3/4	33	234	170	22228 CC
SOFN 328	140	138	165	320	340	220	300	20	425	230	80	510	120	630	60	35	170	8	M30	R1/2	R3/4	42	287	215	22328 CC
SOFN 230	150	148	170	265	280	190	265	15	375	200	65	450	115	540	50	35	140	8	M30	R1/2	R3/4	44	239	173	22230 CC
SOFN 330	150	148	175	335	350	240	320	15	455	245	75	545	150	650	65	35	175	10	M30	R1/2	R3/4	44	292	225	22330 CC
SOFN 232	160	158	178	298	316	205	280	18	405	215	65	470	120	560	50	35	158	10	M30	R1/2	R3/4	38	266	193	22232 CC
SOFN 332	160	158	190	350	370	250	335	20	480	260	85	590	150	720	70	42	185	10	M36	R1/2	R3/4	50	315	240	22332 CC
SOFN 234	170	168	195	330	350	230	310	20	440	235	70	515	130	610	55	35	175	10	M30	R1/2	R3/4	46	290	213	22234 CC
SOFN 334	170	168	197	358	378	260	350	20	510	275	85	600	160	730	70	42	189	12	M36	R1/2	R3/4	44	321	244	22334 CC
SOFN 236	180	178	205	340	360	240	320	20	455	245	75	545	150	650	65	35	180	10	M30	R1/2	R3/4	44	296	218	22236 CC
SOFN 336	180	178	210	384.5	404	280	370	19.5	565	305	95	670	180	820	80	42	202	12	M36	R1/2	R3/4	48	342	260	22336 CC
SOFN 238	190	188	220	350	370	250	335	20	480	260	85	590	150	720	70	42	185	12	M36	R1/ 2	R3/4	50	317	226	22238 CC
SOFN 240	200	198	227	358	378	260	350	20	510	275	85	600	160	730	70	42	189	12	M36	R1/ 2	R3/4	44	315	233	22240 CC
SOFN 244	220	218	255	384.5	404	280	370	19.5	565	305	95	670	180	820	80	42	202	12	M36	R1/ 2	R3/4	48	342	251	22244 CC
SOFN248	240	238	270	400	420	290	380	20	625	340	100	740	190	900	80	42	210	12	M36	R1/ 2	R3/4	56	360	266	22248 CC