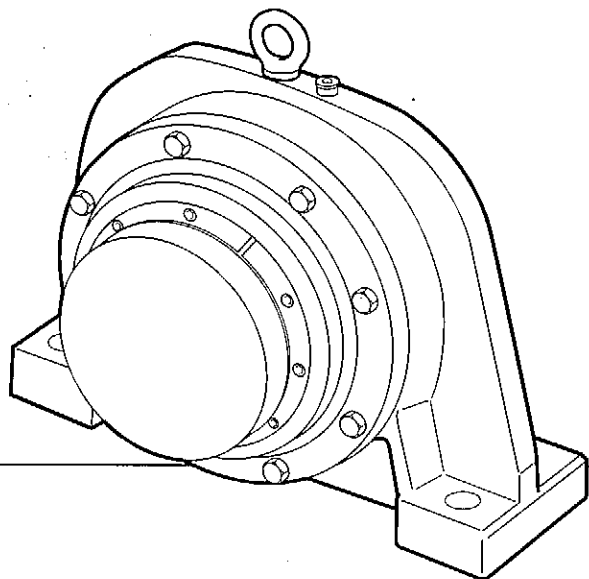


SBD plummer block housings

Extracted from SKF Cat 4005



Data summary:

- Non-split plummer block housings.
- Suitable for spherical roller bearings.
- Shaft diameter range 90–420 mm.
- Direct or adapter sleeve mounting.
- Grease lubrication.
- Cast steel (SBDS). Also available in high-grade grey cast iron (SBDC) or spheroidal graphite cast iron (SBDD).
- Labyrinth seals.
- Eye bolts for easy handling.

- SBD plummer block housings, standard type, for spherical roller bearings with adapter sleeve on plain cylindrical shafts – page 194
- SBD plummer block housings, C type, for spherical roller bearings with adapter sleeve on stepped cylindrical shafts – page 200
- SBD plummer block housings, E type, for spherical roller bearings with cylindrical bore on plain cylindrical shafts – page 206
- SBD plummer block housings, G type, for spherical roller bearings with cylindrical bore on stepped cylindrical shafts – page 212

SBD housings are non-split bearing housings for use with spherical roller bearings. They are available for shaft diameters from 90 to 420 mm. The bearings can be mounted on adapter sleeves, or directly on the shaft.

These bearing housings are able to accommodate heavy loads not only acting towards the support surface, but also in other directions. The housings can be supplied with end covers and are available for locating and non-locating bearing arrangements.

Materials

As standard, the housings are manufactured in cast steel (SBDS). If required, housings can be made from grey cast iron (SBDC) or spheroidal graphite cast iron (SBDD).

Permissible load

Direction of loading

SBD plummer block housings are designed to accommodate loads acting at right angles to the support surfaces. In these cases the permissible loads are governed by the load carrying capacity of the bearings incorporated. If the loads act at other angles it is necessary to check that the housing and the attachment bolts will withstand the loads.

Housing strength

Approximate values of the load P , corresponding to the breaking loads for the various housings at different load directions, are given in Table 1. To obtain the permissible load for a given housing, the appropriate breaking load value should be divided by a factor which is selected after considering the safety requirements. In general engineering a safety factor of 6 is often used.

For housings made of spheroidal graphite cast iron and grey cast iron the values of P given in Table 1 should be multiplied by 0,85 and 0,5 respectively.

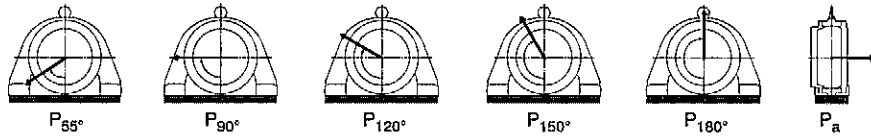
Tightening torque

To be able to carry the permissible load it is important that the attachment bolts in the feet are correctly tightened.

When the load acts at an angle of between 55 and 120° or, in an axial direction when the load exceeds 5 % of P_{180° , the housing should be dowelled to its supporting surface or located by stops in the direction of the load. The strength of the attachment bolts must also be checked.

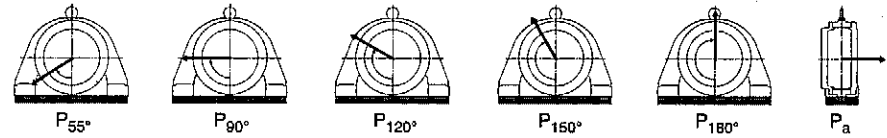
SBD plummer block housings

Table 1 Breaking loads for SBDS housings



Housing Size	Breaking loads for cast steel housings					
	P _{55°}	P _{90°}	P _{120°}	P _{150°}	P _{180°}	P _a
kN						
2220 3024	1 300	1 050	1 000	800	1 000	200
3122 3220	1 870	1 500	1 650	1 320	1 650	330
2222 3026	1 550	1 250	1 100	900	1 100	220
3124 3222	1 840	1 470	1 650	1 320	1 650	330
3028	1 750	1 400	1 200	1 000	1 200	240
3126	1 980	1 580	1 700	1 360	1 700	340
2224	1 750	1 400	1 200	1 000	1 200	240
3224	1 980	1 580	1 700	1 360	1 700	340
3030	2 000	1 600	2 100	1 700	2 100	400
3128	2 250	1 800	1 700	1 360	1 700	340
2226	2 000	1 600	2 100	1 700	2 100	400
3226	2 250	1 800	1 700	1 360	1 700	340
3032	2 250	1 800	2 200	1 800	2 200	440
2228	2 700	2 150	2 200	1 800	2 200	440
3130 3228	2 700	2 150	1 750	1 400	1 750	350
3034	2 700	2 150	2 200	1 800	2 200	440
2230	3 000	2 400	2 200	1 800	2 200	440
3132 3230	3 050	2 450	1 800	1 440	1 800	360
3036	3 000	2 400	2 200	1 800	2 200	440
3134	3 500	2 800	1 900	1 520	1 900	380
2232 3038	3 300	2 650	2 400	1 900	2 400	480
3232	3 500	2 800	1 900	1 520	1 900	380
2234 3040	4 200	3 350	2 000	1 600	2 000	400
3136	3 850	3 050	3 000	2 400	3 000	600
2236	4 200	3 350	2 000	1 600	2 000	400
3234	4 350	3 500	3 400	2 700	3 400	680
2238 3044	4 500	3 650	2 100	1 680	2 100	420
3138 3236	4 350	3 500	3 400	2 700	3 400	680
2240 3048	5 500	4 450	2 250	1 800	2 250	450
3140 3238	4 950	3 950	4 800	3 800	4 800	960
3240	6 000	4 850	2 500	2 000	2 500	500
6 000	4 850	2 500	2 000	2 500	500	
2244 3052	5 550	4 450	4 900	3 900	4 900	980
3148 3244	6 700	5 400	3 000	2 400	3 000	600
3056	6 450	5 150	6 000	4 800	6 000	1 200
2248	7 150	5 700	6 200	5 000	6 200	1 240
3152 3248	7 500	6 050	3 500	2 800	3 500	700
3060	7 150	5 700	6 200	5 000	6 200	1 240

Table 1 (continued)



Housing Size	Breaking loads for cast steel housings					
	P _{55°}	P _{90°}	P _{120°}	P _{150°}	P _{180°}	P _a
kN						
2252 3064	9 200	7 400	4 100	3 300	4 100	820
3156	7 850	6 300	6 700	5 300	6 700	1 300
2256	9 200	7 400	4 100	3 300	4 100	820
3252	8 650	6 900	6 700	5 300	6 700	1 300
3068	10 000	8 100	4 400	3 500	4 400	880
3256	8 650	6 900	6 700	5 300	6 700	1 300
2260 3072	9 450	7 550	8 000	6 400	8 000	1 600
3164 3260	11 700	9 350	5 000	4 000	5 000	1 000
3076	10 600	8 500	8 200	6 600	8 200	1 640
2264	11 800	9 500	8 900	7 100	8 900	1 800
3080	14 000	11 150	5 700	4 500	5 700	1 140
3264	11 800	9 500	8 900	7 100	8 900	1 800
3172	14 200	11 400	6 500	5 200	6 500	1 300
3084	13 100	10 550	9 100	7 200	9 100	1 800
3176 3268	16 000	12 800	6 500	5 200	6 500	1 300
3180 3272	17 500	14 000	7 200	5 700	7 200	1 440
3276	18 500	14 750	8 000	6 400	8 000	1 600
3184	19 000	15 300	8 000	6 400	8 000	1 800
3280	22 000	17 600	9 100	7 300	9 100	1 820
3284	24 000	19 000	10 500	8 400	10 500	2 100

SBD plummer block housings

Seals

The SBD housings are fitted with labyrinth seals. To enhance seal efficiency, particularly where the environment is dusty or damp, housings for spherical roller bearings of series 230 and 222 have ducts so that grease can be supplied to the labyrinths. Generally however, the excess grease from the bearing which enters the labyrinths will ensure adequate sealing. The housings can be supplied with end covers and are available for located and non-located bearing arrangements.

Lubrication

SBD plummer block housings are designed for grease lubrication. The recommended initial grease fill for each housing is shown in the housing tables.

Mounting

The adapter sleeve designation OH .. H shown in the tables indicates that the sleeve is provided with the necessary ducts to enable it to be mounted using the oil injection method. Oil is supplied to the nut side of the sleeve.

Designation system

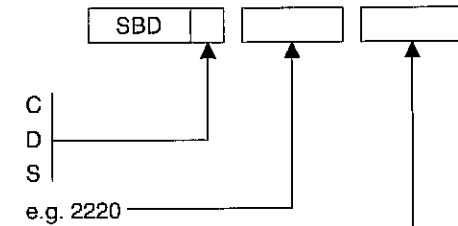
The designations of the housings are made up of the basic designation denoting the basic design, material and size plus supplementary designations covering design variants.

Basic designation

Basic design:

Material: Housing of
 – grey cast iron
 – spheroidal graphite cast iron
 – cast steel

Size designation:

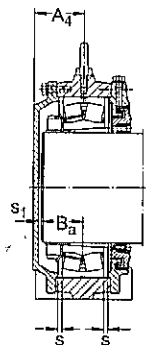


Supplementary designations

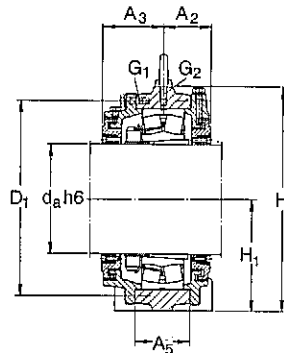
Housing for bearing with adapter sleeve for plain cylindrical shaft	No symbol
Housing for bearing with adapter sleeve for stepped cylindrical shaft	C
Housing for bearing with single stepped cylindrical shaft	E
Housing for bearing with double stepped cylindrical shaft	G
Housings for shaft end, with end cover	A
Housing for through shaft	B
Housing for non-locating bearing	L
Housing for locating bearing	F

For combinations the symbols are written in the same order as presented above.

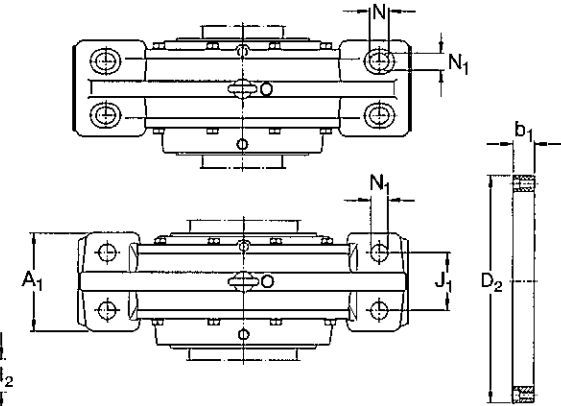
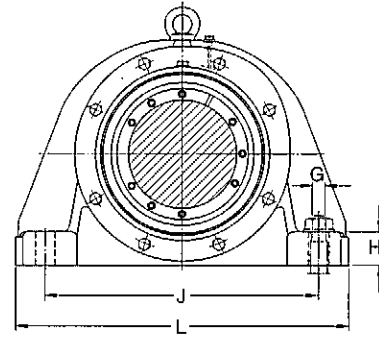
**SBD plummer block housings, standard type,
for spherical roller bearings with adapter sleeve
on plain cylindrical shafts**
d_a 90–160 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

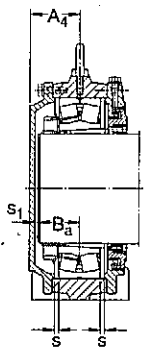


Shaft diameter d _a	Housing Dimensions					D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	G ₂	Designation Housing of cast steel
	A ₁	A ₂	A ₃	A ₄	A ₅														
90	110	70	85	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 2220
100	150	81	102	83	80	215	270	130	40	300	80	400	35	25	2	20	M 8	M 12	SBDS 3122
	120	78	90	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 2222
	130	91	103	76	90	230	285	140	42	350	70	440	-	28	2	24	M 8	M 16	SBDS 3222
110	110	63	83	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 3024
	140	76	93	78	85	230	285	140	40	330	80	410	35	25	2	20	M 12	M 12	SBDS 3124
	130	80,5	95,5	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 2224
	140	93	108	78	95	245	305	150	42	370	75	470	35	30	2	24	M 12	M 16	SBDS 3224
115	120	68	88	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 3026
	140	80	100	80	90	240	295	145	40	350	80	430	35	25	2	20	M 12	M 12	SBDS 3126
	140	88	98	70	78	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 2226
	150	103	108	78	100	260	325	160	45	400	85	500	40	30	2	24	M 12	M 16	SBDS 3226
125	130	68	88	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 3028
	150	85	110	85	95	260	315	155	45	380	85	470	35	25	2	20	M 12	M 12	SBDS 3128
	160	94	104	83	82	275	330	165	50	420	95	510	-	35	3	30	M 10	M 12	SBDS 2228
	160	108	118	88	110	285	350	170	50	430	85	530	40	30	3	24	M 16	M 20	SBDS 3228
135	140	73	94	70	76	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 3030
	200	93	113	93	102	285	345	170	60	450	110	580	45	35	3	24	M 12	M 16	SBDS 3130
	170	98	108	88	90	300	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 2230
	170	113	123	93	120	305	375	180	54	450	90	550	45	35	3	30	M 16	M 20	SBDS 3230
140	150	78	98	76	76	260	310	155	45	390	90	480	-	28	3	24	M 10	M 12	SBDS 3032
	200	98	123	98	110	310	368	180	55	430	110	540	40	30	3	24	M 12	M 16	SBDS 3132
	180	101	116	88	96	315	370	185	55	480	105	570	-	35	3	30	M 12	M 16	SBDS 2232
	180	118	133	98	130	330	395	190	58	490	105	600	-	35	3	30	M 16	M 20	SBDS 3232
150	160	78	103	83	82	280	330	165	50	420	95	510	-	35	3	30	M 10	M 12	SBDS 3034
	200	113	136	112	120	330	395	190	60	470	110	570	45	35	3	30	M 12	M 20	SBDS 3134
	190	112,5	127,5	97	104	335	400	200	60	510	110	600	-	35	4	30	M 12	M 16	SBDS 2234
	200	128	143	103	135	345	410	200	62	525	110	640	45	35	3	30	M 16	M 20	SBDS 3234
160	170	83	108	88	90	305	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 3036
	200	118	138	116	125	350	410	200	60	490	105	600	45	35	3	30	M 16	M 20	SBDS 3136
	200	118	133	102	110	360	430	215	65	540	115	640	-	42	4	36	M 16	M 20	SBDS 2236
	210	133	148	108	140	360	430	210	65	550	120	680	45	35	3	30	M 16	M 20	SBDS 3236

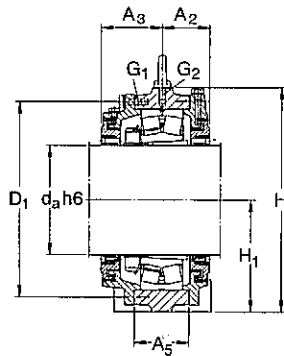
Shaft diameter d _a	Other dimensions	Appropriate bearing	adapter sleeve	Masses Housing type		Adapter ring Designation	Dimensions		Grease quantity ¹⁾ Initial fill		
				A	B		D ₂	b ₁	A	B	
90	45	11	22220 EK	H 320	23,0	25,0	PSBD 90	118	18	0,90	0,40
100	50	11	22222 EK	H 322	40,0	45,0	PSBD 100	128	18	1,00	0,50
	60	9	23222 CCK/W33	H 2322	46,0	50,0	PSBD 100	128	18	0,60	0,50
	50	11	22222 EK	H 322	37,0	40,0	PSBD 100	128	18	1,00	0,50
110	48	8	23024 CCK/W33	H 3024	19,0	20,0	PSBD 110	138	18	0,40	0,30
	56	13	23124 CCK/W33	H 3124	45,0	50,0	PSBD 110	138	18	0,50	0,40
	55	6	22224 EK	H 3124	43,0	46,0	PSBD 110	138	18	1,00	0,50
	64	7	23224 CCK/W33	H 2324	50,0	55,0	PSBD 110	138	18	0,80	0,70
115	52	9	23026 CCK/W33	H 3026	28,0	30,0	PSBD 115	143	18	0,50	0,40
	58	15	23126 CCK/W33	H 3126	50,0	55,0	PSBD 115	143	18	0,50	0,50
	57	5	22226 EK	H 3126	52,0	56,0	PSBD 115	143	18	1,10	0,60
	66	5	23226 CCK/W33	H 2326	60,0	65,0	PSBD 115	143	18	0,90	0,80
125	54	7	23028 CCK/W33	H 3028	32,0	35,0	PSBD 125	153	18	0,50	0,50
	62	16	23128 CCK/W33	H 3128	58,0	65,0	PSBD 125	153	18	0,70	0,60
	62	13	22228 CCK/W33	H 3128	65,0	70,0	PSBD 125	153	18	1,20	0,80
	72	9	23228 CCK/W33	H 2328	74,0	80,0	PSBD 125	153	18	1,10	1,00
135	56	6	23030 CCK/W33	H 3030	37,0	40,0	PSBD 135	170	20	0,60	0,60
	70	15	23130 CCK/W33	H 3130	78,0	85,0	PSBD 135	170	20	0,90	0,90
	66	14	22230 CCK/W33	H 3130	77,0	82,0	PSBD 135	170	20	1,20	0,90
	78	7	23230 CCK/W33	H 2330	87,0	95,0	PSBD 135	170	20	1,30	1,30
140	62	6	23032 CCK/W33	H 3032	41,0	45,0	PSBD 140	175	20	0,70	0,60
	75	15	23132 CCK/W33	H 3132	90,0	100	PSBD 140	175	20	1,20	1,10
	72	8	22232 CCK/W33	H 3132	90,0	96,0	PSBD 140	175	20	1,30	1,00
	84	6	23232 CCK/W33	H 2332	100	110	PSBD 140	175	20	1,60	1,50
150	66	9	23034 CCK/W33	H 3034	50,0	55,0	PSBD 150	185	20	0,80	0,70
	78	26	23134 CCK/W33	H 3134	100	110	PSBD 150	185	20	1,40	1,30
	75	14	22234 CCK/W33	H 3134	103	110	PSBD 150	185	20	1,40	1,20
	88	7	23234 CCK/W33	H 2334	130	140	PSBD 150	185	20	1,80	1,80
160	70	10	23036 CCK/W33	H 3036	64,0	70,0	PSBD 160	195	20	1,00	0,90
	82	26	23136 CCK/W33	H 3136	118	130	PSBD 160	195	20	1,60	1,50
	78	14	22236 CCK/W33	H 3136	112	120	PSBD 160	195	20	1,80	1,50
	90	10	23236 CCK/W33	H 2336	147	160	PSBD 160	195	20	2,10	2,00

¹⁾ Based on 100 % filling

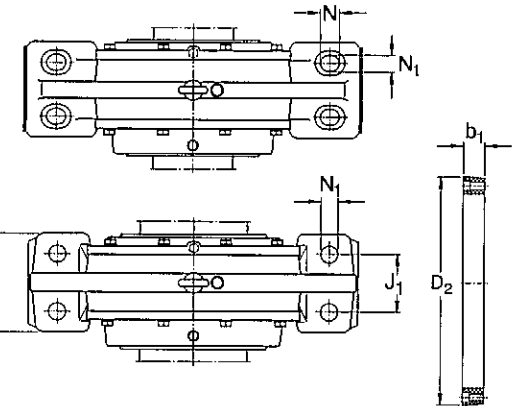
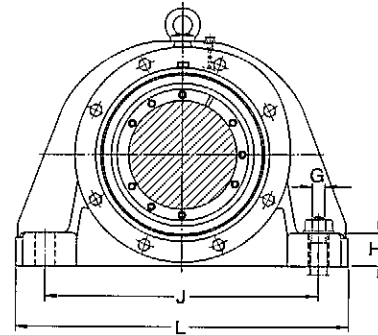
**SBD plummer block housings, standard type,
for spherical roller bearings with adapter sleeve
on plain cylindrical shafts**
 d_a 170–300 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

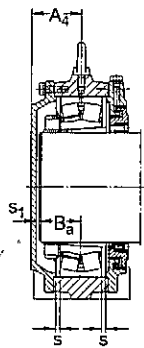


Shaft diameter d_a	Housing Dimensions					D_1	H	H_1	H_2	J	J_1	L	N	N_1	s	G	G_1	G_2	Designation Housing of cast steel
	A_1	A_2	A_3	A_4	A_5														
170	180	93	118	88	96	315	370	185	55	480	105	570	—	35	3	30	M12	M16	SBDS 3038
	210	123	143	120	130	370	435	210	65	550	120	680	45	30	3	36	M16	M20	SBDS 3138
	200	118	133	102	110	370	430	215	65	540	115	640	—	42	4	36	M16	M20	SBDS 2238
	220	138	153	113	150	385	455	220	75	560	120	710	45	35	4	30	M16	M20	SBDS 3238
180	190	97	122	97	104	340	400	200	60	510	110	600	—	35	4	30	M12	M16	SBDS 3040
	220	127	147	127	135	360	455	220	85	560	120	710	52	42	3	36	M16	M24	SBDS 3140
	210	122	134,5	107	118	390	450	225	70	560	120	680	—	42	4	36	M16	M20	SBDS 2240
	240	138	158	118	165	405	475	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3240
200	200	102	137	102	110	370	430	215	65	540	115	640	—	42	4	36	M16	M20	SBDS 3044
	220	135	160	135	150	420	485	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3144
	220	124,5	159,5	117	128	435	500	250	75	600	130	720	—	42	4	36	M16	M20	SBDS 2244
	250	148	183	133	175	445	525	260	80	700	140	850	52	42	4	36	M20	M24	SBDS 3244
220	210	102	142	107	118	390	450	225	70	560	120	680	—	42	4	36	M16	M20	SBDS 3048
	250	152	182	142	160	455	550	270	80	720	140	890	52	42	4	36	M20	M24	SBDS 3148
	250	130	165	132	144	490	570	285	85	690	150	820	—	42	5	36	M20	M24	SBDS 2248
	250	148	188	148	190	490	590	290	90	750	140	900	52	42	5	36	M20	M24	SBDS 3248
240	220	107	147	117	128	435	500	250	75	600	130	720	—	42	4	36	M16	M20	SBDS 3052
	250	152	187	152	175	490	590	290	90	750	140	900	52	42	4	36	M20	M24	SBDS 3152
	260	145	182,5	137	154	520	590	295	90	730	160	860	—	42	5	36	M20	M24	SBDS 2252
	290	167	208	158	205	535	625	310	95	800	160	960	65	42	5	36	M20	M24	SBDS 3252
260	240	117	157	122	128	455	520	260	80	630	140	760	—	42	5	36	M16	M20	SBDS 3056
	250	157	197	165	175	510	590	290	90	750	140	900	65	42	5	36	M24	M24	SBDS 3156
	270	152	192	147	150	555	630	315	95	770	170	900	—	42	5	36	M20	M24	SBDS 2256
	300	178	218	163	210	555	645	320	100	840	170	1000	65	42	5	36	M24	M30	SBDS 3256
280	250	122	167	132	144	500	570	285	85	690	150	820	—	42	5	36	M20	M24	SBDS 3060
	300	162	207	167	190	550	655	320	100	840	170	1000	65	42	5	36	M24	M30	SBDS 3160
	280	160	191	152	168	585	660	330	100	820	180	960	—	42	5	36	M20	M24	SBDS 2260
	330	182	222	187	230	600	705	350	105	920	180	1100	75	56	6	48	M24	M30	SBDS 3260
300	260	122	172	137	154	520	590	295	90	730	160	860	—	42	5	36	M20	M24	SBDS 3064
	300	177	212	187	210	590	702	350	100	940	160	1150	65	42	5	36	M24	M30	SBDS 3164
	320	175	202	167	180	640	720	360	110	900	200	1060	—	56	5	48	M24	M30	SBDS 2264
	360	192	237	187	250	640	760	370	115	960	200	1150	75	56	6	48	M24	M30	SBDS 3264

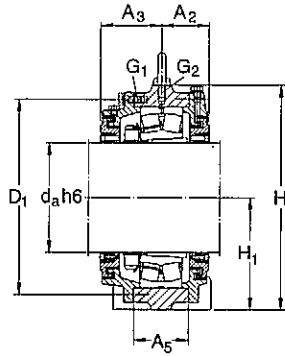
Shaft diameter d_a	Other dimensions B_a	s_1	Appropriate bearing	adapter sleeve	Masses Housing type		Adapter ring Designation	Dimensions		Grease quantity ¹⁾ Initial fill	
					A	B		D_2	b_1	A	B
170	72	8	23038 CCK/W33	H 3038	74,0	80,0	PSBD 170	205	20	1,10	1,00
	88	22	23138 CCK/W33	H 3138	146	160	PSBD 170	205	20	2,00	1,80
	82	10	22238 CCK/W33	H 3138	126	135	PSBD 170	205	20	1,80	1,60
	95	10	23238 CCK/W33	H 2338	170	185	PSBD 170	205	20	2,40	2,30
180	78	11	23040 CCK/W33	H 3040	83,0	90,0	PSBD 180	215	20	1,30	1,10
	95	22	23140 CCK/W33	H 3140	175	190	PSBD 180	215	20	2,40	2,10
	85	12	22240 CCK/W33	H 3140	145	155	PSBD 180	215	20	2,00	1,80
	100	10	23240 CCK/W33	H 2340	200	220	PSBD 180	215	20	2,60	2,50
200	80	12	23044 CCK/W33	OH 3044 H	107	115	PSBD 200	246	25	1,70	1,50
	100	25	23144 CCK/W33	OH 3144 H	205	220	PSBD 200	246	25	2,90	2,50
	95	10	22244 CCK/W33	OH 3144 H	187	200	PSBD 200	246	25	2,60	2,40
	112	11	23244 CCK/W33	OH 2344 H	270	290	PSBD 200	246	25	3,40	3,30
220	85	12	23048 CCK/W33	OH 3048 H	120	130	PSBD 220	266	25	2,00	1,70
	106	26	23148 CCK/W33	OH 3148 H	250	270	PSBD 220	266	25	3,40	3,00
	105	15	22248 CCK/W33	OH 3148 H	235	250	PSBD 220	266	25	3,60	3,40
	122	16	23248 CCK/W33	OH 2348 H	345	370	PSBD 220	266	25	4,30	4,00
240	92	13	23052 CCK/W33	OH 3052 H	153	165	PSBD 240	286	25	2,50	2,30
	118	24	23152 CCK/W33	OH 3152 H	300	320	PSBD 240	286	25	4,40	3,80
	110	13	22252 CACK/W33	OH 3152 H	290	310	PSBD 240	286	25	4,10	3,80
	132	16	23252 CACK/W33	OH 2352 H	435	470	PSBD 240	286	25	5,10	4,60
260	96	14	23056 CCK/W33	OH 3056 H	177	190	PSBD 260	306	25	2,80	2,60
	120	35	23156 CCK/W33	OH 3156 H	325	350	PSBD 260	306	25	4,80	4,20
	115	18	22256 CACK/W33	OH 3156 H	330	350	PSBD 260	306	25	5,20	4,90
	135	16	23256 CACK/W33	OH 2356 H	490	530	PSBD 260	306	25	5,50	5,00
280	105	15	23060 CCK/W33	OH 3060 H	215	230	PSBD 280	326	25	3,70	3,30
	125	32	23160 CCK/W33	OH 3160 H	400	430	PSBD 280	326	25	6,00	5,20
	120	17	22260 CACK/W33	OH 3160 H	400	430	PSBD 280	326	25	5,80	5,50
	142	33	23260 CACK/W33	OH 3260 H	590	640	PSBD 280	326	25	7,00	6,30
300	108	15	23064 CCK/W33	OH 3064 H	240	255	PSBD 300	350	30	4,20	3,80
	135	40	23164 CCK/W33	OH 3164 H	490	530	PSBD 300	350	30	7,50	6,40
	125	26	22264 CACK/W33	OH 3164 H	485	520	PSBD 300	350	30	7,90	7,50
	152	21	23264 CACK/W33	OH 3264 H	700	760	PSBD 300	350	30	8,20	7,30

¹⁾ Based on 100 % filling

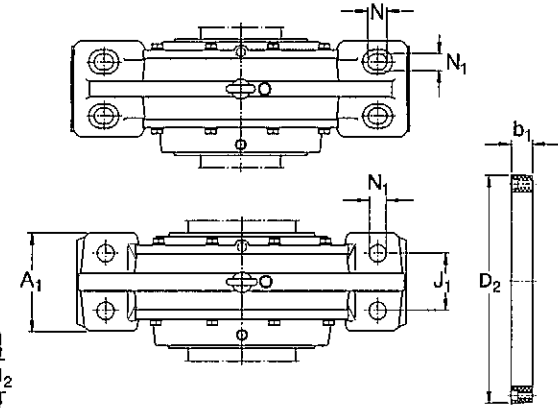
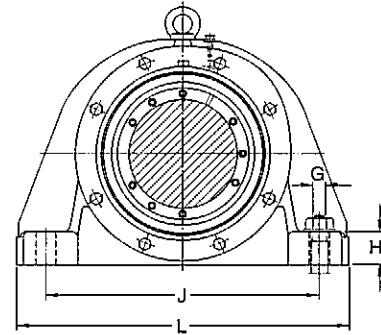
**SBD plummer block housings, standard type,
for spherical roller bearings with adapter sleeve
on plain cylindrical shafts**
d_a 320–400 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

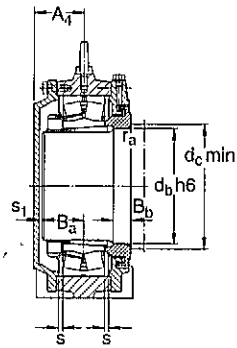


Shaft diameter d _a	Housing Dimensions										Designation Housing of cast steel								
	A ₁	A ₂	A ₃	A ₄	A ₅	D ₁	H	H ₁	H ₂	J		J ₁	L	N	N ₁	s	G	G ₁	G ₂
mm	mm																		
320	270	132	177	147	158	565	630	315	95	770	170	900	-	42	6	36	M20	M24	SBDS 3068
	360	197	242	237	220	630	735	370	115	960	200	1150	75	56	6	48	M24	M30	SBDS 3168
	380	202	272	237	265	680	810	390	125	980	200	1200	75	60	6	56	M24	M36	SBDS 3268
340	280	132	182	152	168	585	660	330	100	820	180	960	-	42	6	36	M20	M24	SBDS 3072
	370	197	247	243	225	650	760	380	115	1000	200	1200	75	56	6	48	M24	M30	SBDS 3172
	400	227	262	247	275	710	825	410	130	1040	210	1280	80	68	7	64	M24	M36	SBDS 3272
360	300	137	187	157	168	605	680	340	105	840	190	1000	-	56	6	48	M20	M24	SBDS 3076
	380	202	257	254	230	680	790	390	125	1000	200	1200	75	60	6	56	M30	M30	SBDS 3176
	405	232	297	257	295	745	880	425	135	1100	225	1350	85	68	7	64	M30	M36	SBDS 3276
380	320	142	202	167	180	650	720	360	110	900	200	1060	-	56	6	48	M24	M30	SBDS 3080
	400	197	262	247	235	710	845	410	130	1040	210	1280	80	68	7	64	M30	M36	SBDS 3180
	450	242	307	257	300	790	905	450	145	1160	240	1430	85	68	7	64	M30	M36	SBDS 3280
400	340	147	202	167	180	670	750	375	115	940	210	1100	-	56	6	48	M24	M30	SBDS 3084
	420	212	289	257	260	760	900	450	135	1100	210	1350	85	68	7	64	M30	M36	SBDS 3184
	470	252	317	267	315	835	955	470	150	1220	255	1500	90	72	8	64	M30	M36	SBDS 3284

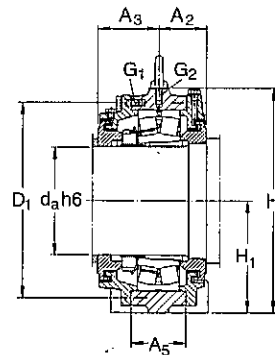
Shaft diameter d _a	Other dimensions		Appropriate bearing	adapter sleeve	Masses Housing type		Adapter ring Designation		Dimensions		Grease quantity ¹⁾	
	B _a	s ₁			A	B	D ₂	b ₁	Initial fill A	Housing type B		
mm	mm		-	-	kg		-	-	mm		kg	
320	120	13	23068 CCK/W33	OH 3068 H	280	305	PSBD 320	370	30	5,20	4,70	
	155	70	23168 CCK/W33	OH 3168 H	590	630	PSBD 320	370	30	10,0	8,20	
	175	47	23268 CAK/W33	OH 3268 H	830	900	PSBD 320	370	30	9,90	8,80	
340	120	17	23072 CCK/W33	OH 3072 H	315	340	PSBD 340	390	30	6,10	5,40	
	160	67	23172 CACK/W33	OH 3172 H	660	700	PSBD 340	390	30	11,8	9,30	
	180	51	23272 CAK/W33	OH 3272 H	950	1020	PSBD 340	390	30	12,0	10,5	
360	124	17	23076 CCK/W33	OH 3076 H	350	380	PSBD 360	410	30	6,90	6,00	
	165	73	23176 CAK/W33	OH 3176 H	730	770	PSBD 360	410	30	13,8	10,8	
	186	55	23276 CAK/W33	OH 3276 H	1060	1140	PSBD 360	410	30	14,5	12,5	
380	134	17	23080 CACK/W33	OH 3080 H	420	450	PSBD 380	430	30	8,20	7,30	
	170	61	23180 CAK/W33	OH 3180 H	820	870	PSBD 380	430	30	15,5	12,5	
	196	45	23280 CAK/W33	OH 3280 H	1240	1330	PSBD 380	430	30	18,0	16,0	
400	135	16	23084 CAK/W33	OH 3084 H	465	500	PSBD 400	450	30	8,90	7,90	
	190	51	23184 CK/W33	OH 3184 H	1000	1070	PSBD 400	450	30	18,0	15,0	
	212	39	23284 CAK/W33	OH 3284 H	1500	1600	PSBD 400	450	30	23,0	20,5	

¹⁾ Based on 100 % filling

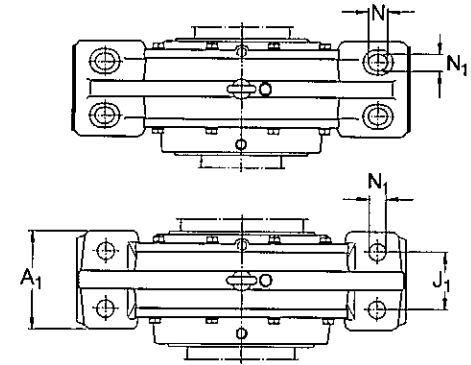
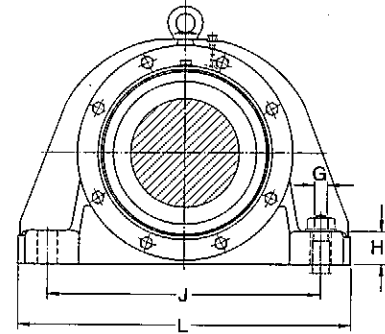
**SBD plummer block housings, C type,
for spherical roller bearings with adapter sleeve
on stepped cylindrical shafts**
d_a 90–160 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

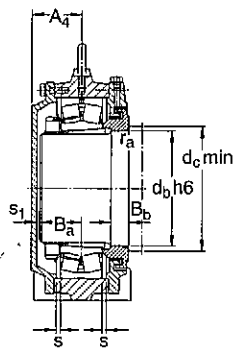


Shaft diameter d _a	Housing Dimensions					Shaft abutment and fillet dimensions													Appropriate bearing	adapter sleeve	Masses Housing type		Grease quantity ¹⁾																						
	A ₁	A ₂	A ₃	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	G ₂			Cast steel	A	B	Initial fill	Housing type																				
mm	mm					mm													-	-	kg		kg																						
90	110	70	85	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 2220 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
100	150	81	102	83	80	215	270	130	40	300	80	400	35	25	2	20	M 12	M 12	SBDS 3122 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	120	78	90	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 2222 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	130	91	103	76	90	230	285	140	42	350	70	440	35	30	2	24	M 12	M 16	SBDS 3222 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
110	110	63	83	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 3024 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	140	76	93	78	85	230	285	140	40	330	80	410	35	25	2	20	M 12	M 12	SBDS 3124 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	130	80,5	95,5	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 2224 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	140	93	108	78	95	245	305	150	42	370	75	470	35	30	2	24	M 12	M 16	SBDS 3224 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
115	120	68	88	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 3026 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	140	80	100	80	90	240	295	145	40	350	80	430	35	25	2	20	M 12	M 12	SBDS 3126 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	140	88	98	70	70	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 2226 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
150	103	108	78	100	260	325	160	45	400	85	500	40	30	2	24	M 12	M 16	SBDS 3226 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
125	130	68	88	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 3028 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	150	85	110	85	95	260	315	155	45	380	85	470	35	25	2	24	M 12	M 12	SBDS 3128 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	160	94	104	83	82	275	330	165	50	420	95	510	-	35	3	30	M 10	M 12	SBDS 2228 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	160	108	118	88	110	285	350	170	50	430	85	530	40	30	3	24	M 16	M 20	SBDS 3228 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
135	140	73	94	70	76	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 3030 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	200	93	113	93	102	285	345	170	60	450	110	580	45	35	3	24	M 12	M 16	SBDS 3130 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	170	98	108	88	90	300	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 2230 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	170	113	123	93	120	305	375	180	54	450	90	550	45	35	3	30	M 16	M 20	SBDS 3230 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
140	150	78	98	76	76	260	310	155	45	390	90	480	-	28	3	24	M 10	M 12	SBDS 3032 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	200	98	123	98	110	310	368	180	55	430	110	540	40	30	3	24	M 12	M 16	SBDS 3132 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	180	101	116	88	96	315	370	185	55	480	105	570	-	35	3	30	M 12	M 16	SBDS 2232 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	180	118	133	98	130	330	395	190	58	490	105	600	45	35	3	30	M 16	M 20	SBDS 3232 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
150	160	78	103	83	82	280	330	165	50	420	95	510	-	35	4	30	M 10	M 12	SBDS 3034 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	200	113	136	112	120	330	395	190	60	470	110	570	45	35	3	30	M 12	M 20	SBDS 3134 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	190	112,5	127,5	97	104	335	400	200	60	510	110	600	-	35	4	30	M 12	M 16	SBDS 2234 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	200	128	143	103	135	345	410	200	62	525	110	640	45	35	3	30	M 16	M 20	SBDS 3234 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
160	170	83	108	88	90	305	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 3036 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	200	118	138	116	125	350	410	200	60	490	105	600	45	35	3	30	M 16	M 20	SBDS 3136 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	200	116	133	102	110	360	430	215	65	540	115	640	-	42	4	36	M 16	M 20	SBDS 2236 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	210	133	148	108	140	360	430	210	65	550	120	680	45	35	3	30	M 16	M 20	SBDS 3236 C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

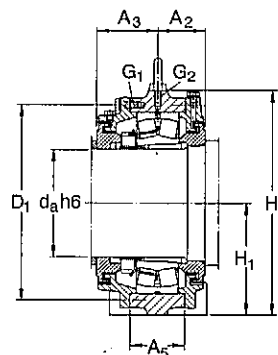
Shaft diameter d _a	Shaft abutment and fillet dimensions						Appropriate bearing	adapter sleeve	Masses Housing type		Grease quantity ¹⁾	
	B _a	B _b	d _b	d _c	r _a	s ₁			A	B	Initial fill	Housing type
mm	mm						-	-	kg		kg	
90	45	35	102	115	4	11	22220 EK	H 320	23,0	25,0	0,90	0,40
100	52	30	112	125	4	25	23122 CCK/W33	H 3122	40,0	45,0	0,40	0,30
	50	35	112	125	4	11	22222 EK	H 322	37,0	40,0	1,00	0,50
	60	32	112	125	4	9	23222 CCK/W33	H 2322	46,0	50,0	0,60	0,50
110	4											

**SBD plummer block housings, C type,
for spherical roller bearings with adapter sleeve
on stepped cylindrical shafts**

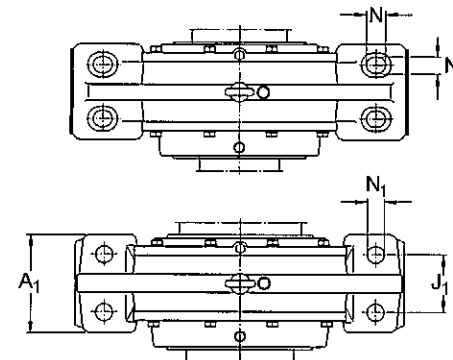
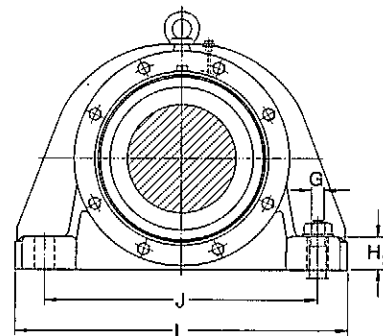
d_a 170–300 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

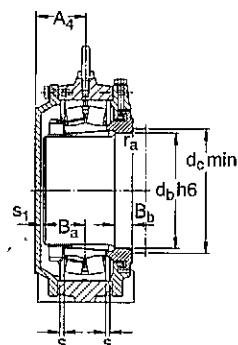


Shaft diameter d_a	Housing Dimensions					Shaft abutment and fillet dimensions													Designation Housing of cast steel
	A_1	A_2	A_3	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L	N	N_1	s	G	G_1	G_2	
mm	mm					mm													
170	180	93	118	88	96	315	370	185	55	480	105	570	-	35	3	30	M12	M16	SBDS 3038 C
	210	123	143	120	130	370	435	210	65	550	120	680	45	35	3	36	M16	M20	SBDS 3138 C
	200	118	133	102	110	370	430	215	65	540	115	640	-	42	4	36	M16	M20	SBDS 2238 C
	220	138	153	113	150	385	455	220	75	560	120	710	45	35	4	30	M16	M20	SBDS 3238 C
180	190	97	122	97	104	340	400	200	60	510	110	600	-	35	4	30	M12	M16	SBDS 3040 C
	220	127	147	127	135	380	455	220	85	560	120	710	52	42	3	36	M16	M24	SBDS 3140 C
	210	122	134,5	107	118	390	450	225	70	560	120	680	-	42	4	36	M16	M20	SBDS 2240 C
	240	138	158	118	165	405	475	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3240 C
200	200	102	137	102	110	370	430	215	65	540	115	640	-	42	4	36	M16	M20	SBDS 3044 C
	230	135	160	135	150	420	485	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3144 C
	220	124,5	159,5	117	128	435	500	250	75	600	130	720	-	42	4	36	M16	M20	SBDS 2244 C
	250	148	183	133	175	445	525	260	80	700	140	850	52	42	4	36	M20	M24	SBDS 3244 C
220	210	102	142	107	118	390	450	225	70	560	120	680	-	42	4	36	M16	M20	SBDS 3048 C
	250	152	182	142	160	455	550	270	80	720	140	890	52	42	4	36	M20	M24	SBDS 3148 C
	250	130	165	132	144	490	570	285	85	690	150	820	-	42	5	36	M20	M24	SBDS 2248 C
	250	148	188	148	190	490	590	290	90	750	140	900	52	42	5	36	M20	M24	SBDS 3248 C
240	220	107	147	117	128	435	500	250	75	600	130	720	-	42	4	36	M16	M20	SBDS 3052 C
	250	152	187	152	175	490	590	290	90	750	140	900	52	42	4	36	M20	M24	SBDS 3152 C
	260	145	182,5	137	154	520	590	295	90	730	160	860	-	42	5	36	M20	M24	SBDS 2252 C
	290	167	208	158	205	535	625	310	95	800	160	960	65	42	5	36	M20	M24	SBDS 3252 C
260	240	117	157	122	128	455	520	260	80	630	140	760	-	42	5	36	M16	M20	SBDS 3056 C
	250	157	197	165	175	510	590	290	90	750	140	900	65	42	5	36	M24	M24	SBDS 3156 C
	270	152	192	147	158	555	630	315	95	770	170	900	-	42	5	36	M20	M24	SBDS 2256 C
	300	178	218	163	210	555	645	320	100	840	170	1000	65	42	5	36	M24	M30	SBDS 3256 C
280	250	122	167	132	144	500	570	285	85	690	150	820	-	42	5	36	M20	M24	SBDS 3060 C
	300	162	207	167	190	550	655	320	100	840	170	1000	65	42	5	36	M24	M30	SBDS 3160 C
	280	160	191	152	168	585	660	330	100	820	180	960	-	42	5	36	M20	M24	SBDS 2260 C
	330	182	222	187	230	600	705	350	105	920	180	1100	75	56	6	48	M24	M30	SBDS 3260 C
300	260	122	172	137	154	520	590	295	90	730	160	860	-	42	5	36	M20	M24	SBDS 3064 C
	300	177	212	187	210	590	702	350	100	940	160	1150	65	42	5	36	M24	M30	SBDS 3164 C
	320	175	202	167	180	640	720	360	110	900	200	1060	-	56	5	48	M24	M30	SBDS 2264 C
	360	192	237	187	250	640	760	370	115	960	200	1150	75	56	6	48	M24	M30	SBDS 3264 C

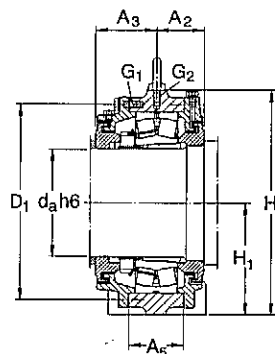
Shaft diameter d_a	Shaft abutment and fillet dimensions						Appropriate bearing	adapter sleeve	Masses		Grease quantity ¹⁾	
	B_a	B_b	d_b	d_c	r_a	s_1			Housing type A	B	Initial fill	Housing type A
mm	mm								kg		kg	
170	72	30	192	215	8	8	23038 CCK/W33	H 3038	74,0	80,0	1,10	1,00
	88	40	192	215	8	22	23138 CCK/W33	H 3138	146	160	2,00	1,80
	82	45	192	215	8	10	22238 CCK/W33	H 3138	126	135	1,80	1,60
	95	45	192	215	8	10	23238 CCK/W33	H 2338	170	185	2,40	2,30
180	78	35	202	225	8	11	23040 CCK/W33	H 3040	83,0	90,0	1,30	1,10
	95	40	202	225	8	22	23140 CCK/W33	H 3140	175	190	2,40	2,10
	85	45	202	225	8	12	22240 CCK/W33	H 3140	145	155	2,00	1,80
	100	45	202	225	8	10	23240 CCK/W33	H 2340	200	220	2,60	2,50
200	80	35	222	245	8	12	23044 CCK/W33	OH 3044 HB	107	115	1,70	1,50
	100	45	222	245	8	25	23144 CCK/W33	OH 3144 HB	205	220	2,90	2,50
	95	45	222	245	8	10	22244 CCK/W33	OH 3144 HB	187	200	2,60	2,40
	112	45	222	245	8	11	23244 CCK/W33	OH 2344 HB	270	290	3,40	3,30
220	85	35	242	265	8	12	23048 CCK/W33	OH 3048 HB	120	130	2,00	1,70
	106	50	242	265	8	26	23148 CCK/W33	OH 3148 HB	250	270	3,40	3,00
	105	45	242	265	8	15	22248 CCK/W33	OH 3148 HB	235	250	3,60	3,40
	122	45	242	265	8	16	23248 CCK/W33	OH 2348 HB	345	370	4,30	4,00
240	92	35	262	285	8	13	23052 CCK/W33	OH 3052 HB	153	165	2,50	2,30
	118	50	262	285	8	24	23152 CCK/W33	OH 3152 HB	300	320	4,40	3,80
	110	50	262	285	8	13	22252 CACK/W33	OH 3152 HB	290	310	4,10	3,80
	132	45	262	285	8	16	23252 CACK/W33	OH 2352 HB	435	470	5,10	4,60
260	96	35	282	305	8	14	23056 CCK/W33	OH 3056 HB	177	190	2,80	2,60
	120	50	282	305	8	35	23156 CCK/W33	OH 3156 HB	325	350	4,80	4,20
	115	50	282	305	8	18	22256 CACK/W33	OH 3156 HB	330	350	5,20	4,90
	135	50	282	305	8	16	23256 CACK/W33	OH 2356 HB	490	530	5,50	5,00
280	105	35	302	325	8	15	23060 CCK/W33	OH 3060 HB	215	230	3,70	3,30
	125	50	302	325	8	32	23160 CCK/W33	OH 3160 HB	400	430	6,00	5,20
	120	50	302	325	8	17	22260 CACK/W33	OH 3160 HB	400	430	5,80	5,50
	142	50	302	325	8	33	23260 CACK/W33	OH 3260 HB	590	640	7,00	6,30
300	108	35	322	345	8	15	23064 CCK/W33	OH 3064 HB	240	255	4,20	3,70
	135	50	322	345	8	40	23164 CCK/W33	OH 3164 HB	490	530	7,50	6,40
	125	55	322	345	8	26	22264 CACK/W33	OH 3164 HB	485	520	7,90	7,50
	152	50	322	345	8	21	23264 CACK/W33	OH 3264 HB	700	760	8,20	7,30

¹⁾ Based on 100 % filling

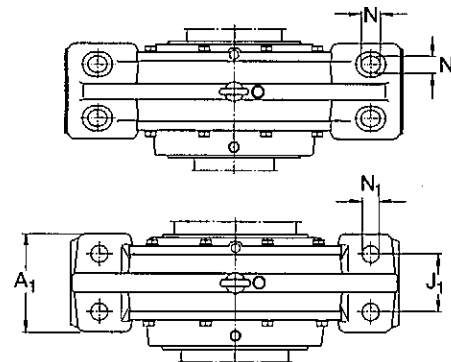
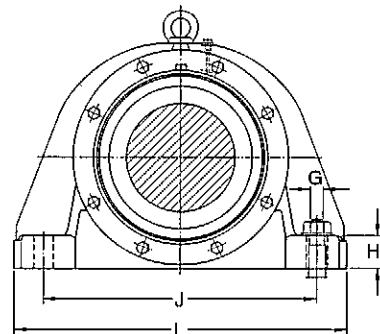
**SBD plummer block housings, C type,
for spherical roller bearings with adapter sleeve
on stepped cylindrical shafts**
 d_a 320–400 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

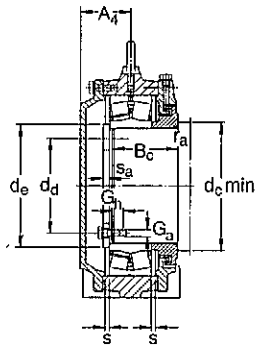


Shaft diameter d_a	Housing Dimensions					Shaft abutment and fillet dimensions													Designation Housing of cast steel
	A_1	A_2	A_3	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L	N	N_1	s	G	G_1	G_2	
320	270	132	177	147	158	565	630	315	95	770	170	900	—	42	6	36	M20	M24	SBDS 3068 C
	360	197	242	237	220	630	735	370	115	960	200	1 150	75	56	6	48	M24	M30	SBDS 3168 C
	380	202	272	237	265	680	810	390	125	980	200	1 200	75	60	6	56	M24	M36	SBDS 3268 C
340	280	132	182	152	168	585	660	330	100	820	180	960	—	42	6	36	M20	M24	SBDS 3072 C
	370	197	247	243	225	650	760	380	115	1 000	200	1 200	75	56	6	48	M24	M30	SBDS 3175 C
	400	227	282	247	275	710	825	410	130	1 040	210	1 280	80	68	7	64	M24	M36	SBDS 3272 C
360	300	137	187	157	168	605	680	340	105	840	190	1 000	—	56	6	48	M20	M24	SBDS 3076 C
	380	202	257	254	230	680	790	390	125	1 000	200	1 200	75	60	6	56	M30	M30	SBDS 3176 C
	405	232	297	257	295	745	880	425	135	1 100	225	1 350	85	68	7	64	M30	M36	SBDS 3276 C
380	320	142	202	167	180	650	720	360	110	900	200	1 060	—	56	6	48	M24	M30	SBDS 3080 C
	400	197	262	247	235	710	845	410	130	1 040	210	1 280	80	68	7	64	M30	M36	SBDS 3180 C
	450	242	307	257	300	790	905	450	145	1 160	240	1 430	85	68	7	64	M30	M36	SBDS 3280 C
400	340	147	202	167	180	670	750	375	115	940	210	1 100	—	56	6	48	M24	M30	SBDS 3084 C
	420	212	289	257	260	760	900	450	135	1 100	210	1 350	85	68	7	64	M30	M36	SBDS 3184 C
	470	252	317	267	315	835	955	470	150	1 220	255	1 500	90	72	8	64	M30	M36	SBDS 3284 C

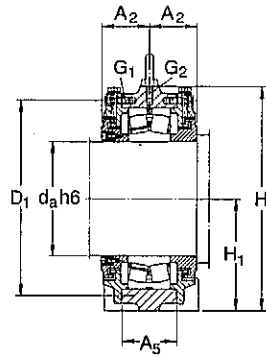
Shaft diameter d_a	Shaft abutment and fillet dimensions						Appropriate bearing	adapter sleeve	Masses		Grease quantity ¹⁾	
	B_a	B_b	d_b	d_c	r_a	s_1			Housing type A	Housing type B	Initial fill	Housing type B
320	120	40	342	365	8	13	23068 CCK/W33	OH 3068 HB	280	305	5,20	4,70
	155	60	342	365	8	70	23168 CCK/W33	OH 3168 HB	590	630	10,0	8,20
	175	50	342	365	8	47	23268 CAK/W33	OH 3268 HB	830	900	9,90	8,80
340	120	40	362	385	8	17	23072 CCK/W33	OH 3072 HB	315	340	6,10	5,40
	160	60	362	385	8	67	23172 CACK/W33	OH 3172 HB	660	700	11,8	9,30
	180	70	362	385	8	51	23272 CAK/W33	OH 3272 HB	950	1 020	12,0	10,5
360	124	40	382	405	8	17	23076 CCK/W33	OH 3076 HB	350	380	6,90	6,00
	165	60	382	405	8	73	23176 CAK/W33	OH 3176 HB	730	770	13,8	10,8
	186	70	382	405	8	55	23276 CAK/W33	OH 3276 HB	1 060	1 140	14,5	12,5
380	134	40	402	425	8	17	23080 CACK/W33	OH 3080 HB	420	450	8,20	7,30
	170	60	402	425	8	61	23180 CAK/W33	OH 3180 HB	820	870	15,5	12,5
	196	70	402	425	8	45	23280 CAK/W33	OH 3280 HB	1 240	1 330	18,0	16,0
400	135	40	422	445	8	16	23084 CAK/W33	OH 3084 HB	465	500	8,90	7,90
	190	60	422	445	8	51	23184 CK/W33	OH 3184 HB	1 000	1 070	18,0	15,0
	212	70	422	445	8	39	23284 CAK/W33	OH 3284 HB	1 500	1 600	23,0	20,5

¹⁾ Based on 100 % filling

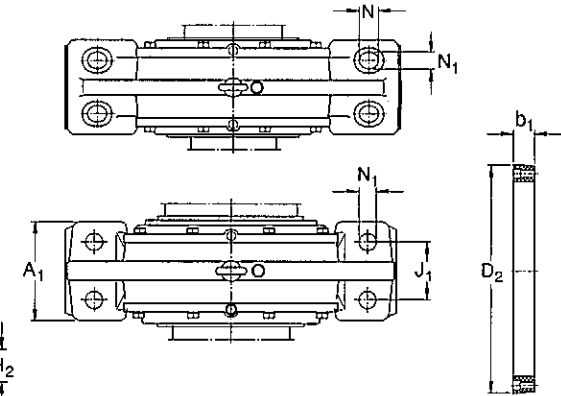
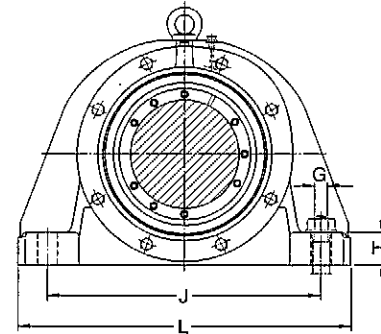
**SBD plummer block housings, E type,
for spherical roller bearings with cylindrical bore
on plain cylindrical shafts**
d_a 100–180 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

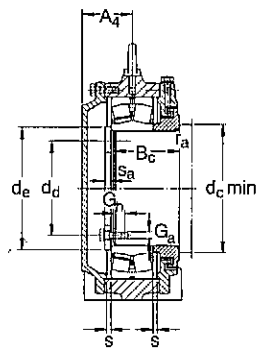


Shaft diameter d _a	Housing Dimensions										Shaft abutment and fillet dimensions						Appropriate bearing	Masses		Adapter ring Designation	Dimensions		Grease quantity ¹⁾		
	A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁		G ₂	Housing type		A	B	D ₂	b ₁	Initial fill
mm	mm										mm						kg		mm		kg				
100	110	70	63	56	195	230	115	35	300	60	370	—	24	2	20	M 8	M 12	SBDS 2220 E							
110	150	81	83	80	215	270	130	40	300	80	400	35	25	2	20	M 12	M 12	SBDS 3122 E							
120	78	66	64	215	260	130	38	340	60	410	—	24	2	20	M 8	M 12	SBDS 2222 E								
130	80,5	68	70	230	285	140	42	350	70	440	35	30	2	24	M 12	M 16	SBDS 3222 E								
140	110	63	63	56	195	230	115	35	300	60	370	—	24	2	20	M 8	M 12	SBDS 3024 E							
140	76	78	85	230	285	140	40	330	80	410	35	25	2	20	M 12	M 12	SBDS 3124 E								
130	80,5	68	70	230	275	140	40	360	70	430	—	28	3	24	M 8	M 12	SBDS 2224 E								
140	93	78	95	245	305	150	42	370	75	470	35	30	2	24	M 12	M 16	SBDS 3224 E								
130	120	68	68	64	215	260	130	38	340	60	410	—	24	2	20	M 8	M 12	SBDS 3026 E							
140	80	80	90	240	295	145	40	350	80	430	35	25	2	20	M 12	M 12	SBDS 3126 E								
140	88	70	70	245	290	145	42	370	80	455	—	28	3	24	M 10	M 12	SBDS 2226 E								
150	103	78	100	260	325	160	45	400	85	500	40	30	2	24	M 12	M 16	SBDS 3226 E								
140	130	68	68	70	230	275	140	40	360	70	430	—	28	3	24	M 8	M 12	SBDS 3028 E							
150	85	85	95	260	315	155	45	380	85	470	35	25	2	20	M 12	M 12	SBDS 3128 E								
160	94	83	82	275	330	165	50	420	95	510	—	35	3	30	M 10	M 12	SBDS 2228 E								
160	108	88	110	285	350	170	50	430	85	530	40	30	3	24	M 16	M 20	SBDS 3228 E								
150	140	78	70	245	290	145	42	370	80	455	—	28	3	24	M 10	M 12	SBDS 3030 E								
200	93	93	102	285	345	170	60	450	110	580	45	35	3	24	M 12	M 16	SBDS 3130 E								
170	98	88	90	300	360	180	52	450	100	540	—	35	3	30	M 12	M 16	SBDS 2230 E								
170	113	93	120	305	375	180	54	450	90	550	45	35	3	30	M 16	M 20	SBDS 3230 E								
160	150	78	76	260	310	155	45	390	90	480	—	28	3	24	M 10	M 12	SBDS 3032 E								
200	98	98	110	310	368	180	55	430	110	540	40	30	3	24	M 12	M 16	SBDS 3132 E								
180	101	88	96	315	370	185	55	460	105	570	—	35	3	30	M 12	M 16	SBDS 2232 E								
180	118	98	130	330	395	190	58	490	105	600	45	35	3	30	M 16	M 20	SBDS 3232 E								
170	160	78	83	82	280	330	165	50	420	95	510	—	35	3	30	M 10	M 12	SBDS 3034 E							
200	113	112	120	330	395	190	60	470	110	570	45	35	3	30	M 12	M 20	SBDS 3134 E								
190	112,5	97	104	335	400	200	60	510	110	600	—	35	4	30	M 12	M 16	SBDS 2234 E								
200	128	103	135	345	410	200	62	525	110	640	45	35	3	30	M 16	M 20	SBDS 3234 E								
180	170	88	88	90	305	360	180	52	450	100	540	—	35	3	30	M 12	M 16	SBDS 3036 E							
200	118	116	125	350	410	200	60	490	105	600	45	35	3	30	M 16	M 20	SBDS 3136 E								
200	118	102	110	360	430	215	65	540	115	640	—	42	4	36	M 16	M 20	SBDS 2236 E								
210	133	108	140	360	430	210	65	550	120	680	45	35	3	30	M 16	M 20	SBDS 3236 E								

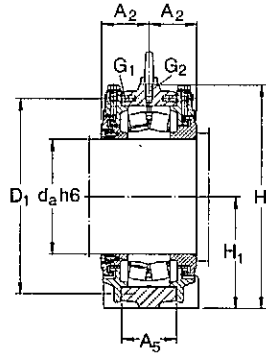
Shaft diameter d _a	Shaft abutment and fillet dimensions										Appropriate bearing	Masses		Adapter ring Designation	Dimensions		Grease quantity ¹⁾	
	B _c	G _a	G _h	d _c min	d _d	d _e	r _a	s _a	Housing type	A		B	D ₂		b ₁	Initial fill	Housing type	
mm	mm										kg		mm		kg			
100	90	M 10	18	115	75	115	4	10	22220 E	23,0	25,0	PSBD 100	128	18	0,90	0,40		
110	107	M 8	15	125	90	122	4	8	23122 CC/W33	40,0	45,0	PSBD 110	138	18	0,40	0,30		
102	M 10	18	125	85	128	4	10	22222 E	37,0	40,0	PSBD 110	138	18	1,00	0,50			
123	M 8	15	125	90	135	4	8	23222 CC/W33	46,0	50,0	PSBD 110	138	18	0,60	0,50			
120	84	M 10	18	135	95	132	4	10	23024 CC/W33	19,0	20,0	PSBD 120	148	18	0,40	0,30		
105	M 8	15	135	100	133	4	8	23124 CC/W33	45,0	50,0	PSBD 120	148	18	0,50	0,40			
107	M 10	18	135	95	138	4	10	22224 E	43,0	46,0	PSBD 120	148	18	1,00	0,50			
128	M 10	18	135	95	145	4	10	23224 CC/W33	50,0	55,0	PSBD 120	148	18	0,80	0,70			
130	92	M 10	18	150	105	145	6	10	23026 CC/W33	28,0	30,0	PSBD 130	165	18	0,50	0,40		
110	M 8	15	150	110	145	6	8	23126 CC/W33	50,0	55,0	PSBD 130	165	18	0,50	0,50			
117	M 10	18	150	105	150	6	10	22226 E	52,0	56,0	PSBD 130	165	18	1,10	0,60			
140	M 10	18	150	105	155	6	10	23226 CC/W33	60,0	65,0	PSBD 130	165	18	0,90	0,80			
140	92	M 10	18	160	115	155	6	10	23028 CC/W33	32,0	35,0	PSBD 140	175	20	0,50	0,50		
116	M 10	18	160	115	155	6	10	23128 CC/W33	58,0	65,0	PSBD 140	175	20	0,70	0,60			
125	M 10	18	160	115	162	6	10	22228 CC/W33	65,0	70,0	PSBD 140	175	20	1,20	0,80			
145	M 10	18	160	115	170	6	10	23228 CC/W33	74,0	80,0	PSBD 140	175	20	1,10	1,00			
150	104	M 10	18	170	125	165	6	10	23030 CC/W33	37,0	40,0	PSBD 150	185	20	0,60	0,60		
130	M 10	18	170	125	165	6	10	23130 CC/W33	78,0	85,0	PSBD 150	185	20	0,90	0,90			
132	M 10	18	170	125	175	6	10	22230 CC/W33	77,0	82,0	PSBD 150	185	20	1,20	0,90			
158	M 10	18	170	125	180	6	10	23230 CC/W33	87,0	95,0	PSBD 150	185	20	1,30	1,30			
160	105	M 10	18	185	135	175	8	10	23032 CC/W33	41,0	45,0	PSBD 160	195	20	0,70	0,60		
138	M 10	18	185	135	178	8	10	23132 CC/W33	90,0	100	PSBD 160	195	20	1,20	1,10			
138	M 12	20	185	130	185	8	12	22232 CC/W33	90,0	96,0	PSBD 160	195	20	1,30	1,00			
167	M 12	20	185	130	190	8	12	23232 CC/W33	100	110	PSBD 160	195	20	1,60	1,50			
170	109	M 10	18	195	145	185	8	10	23034 CC/W33	50,0	55,0	PSBD 170	205	20	0,80	0,70		
154	M 10	18	195	145	185	8	10	23134 CC/W33	100	110	PSBD 170	205	20	1,40	1,30			
152	M 16	25	195	130	200	8	16	22234 CC/W33	103	110	PSBD 170	205	20	1,40	1,20			
179	M 12	20	195	140	205	8	12	23234 CC/W33	130	140	PSBD 170	205	20	1,80	1,80			
180	122	M 10	18	205	155	195	8	10	23036 CC/W33	64,0	70,0	PSBD 180	215	20	1,00	0,90		
163	M 12	20	205	150	195	8	12	23136 CC/W33	118	130	PSBD 180	215	20	1,60	1,50			
157	M 16	25	205	140	210	8	16	22236 CC/W33	112	120	PSBD 180	215	20	1,80	1,50			
185	M 12	20	205	150	215	8	12	23236 CC/W33	147	160	PSBD 180	215	20	2,10	2,00			

¹⁾ Based on 100 % filling

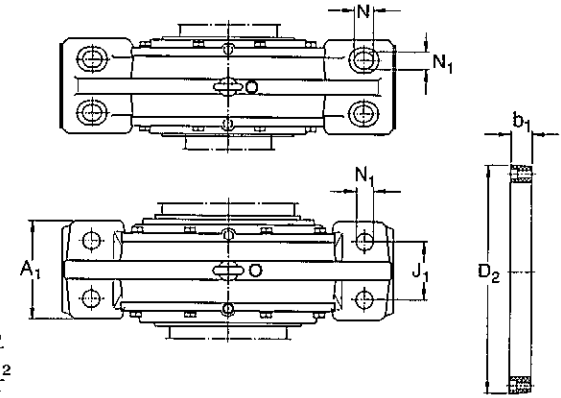
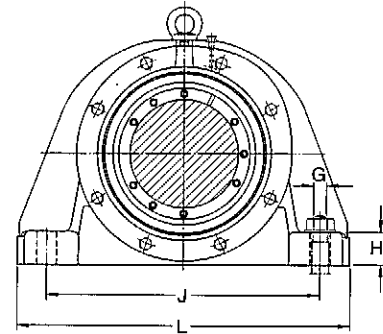
**SBD plummer block housings, E type,
for spherical roller bearings with cylindrical bore
on plain cylindrical shafts**
d_a 190–320 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

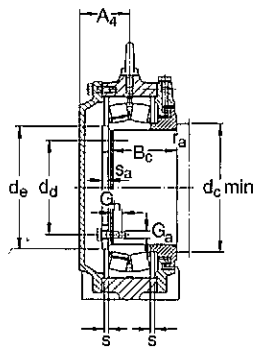


Shaft diameter d _a	Housing Dimensions					Designation										Designation Housing of cast steel		
	A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G		G ₁	G ₂
190	180	93	88	96	315	370	185	55	480	105	570	-	35	3	30	M12	M16	SBDS 3038 E
210	123	120	130	370	435	210	65	550	120	680	-	45	35	3	36	M16	M20	SBDS 3138 E
200	118	102	110	370	430	215	65	540	115	640	-	42	4	36	M16	M20	SBDS 2238 E	
220	138	113	150	385	455	220	75	560	120	710	-	45	35	4	30	M16	M20	SBDS 3238 E
200	190	97	97	104	340	400	200	60	510	110	600	-	35	4	30	M12	M16	SBDS 3040 E
220	127	127	135	380	455	220	85	560	120	710	-	52	42	3	36	M16	M24	SBDS 3140 E
210	122	107	118	390	450	225	70	560	120	680	-	42	4	36	M16	M20	SBDS 2240 E	
240	138	118	165	405	475	235	75	640	140	780	-	52	42	4	36	M16	M24	SBDS 3240 E
220	200	102	102	110	370	430	215	65	540	115	640	-	42	4	36	M16	M20	SBDS 3044 E
230	135	135	150	420	485	235	75	640	140	780	-	52	42	4	36	M16	M24	SBDS 3144 E
220	124,5	117	128	435	500	250	75	600	130	720	-	42	4	36	M16	M20	SBDS 2244 E	
250	148	133	175	445	525	260	80	700	140	850	-	52	42	4	36	M20	M24	SBDS 3244 E
240	210	102	107	118	290	450	225	70	560	120	680	-	42	4	36	M16	M20	SBDS 3048 E
250	152	142	160	455	550	270	80	720	140	890	-	52	42	4	36	M20	M24	SBDS 3148 E
250	130	132	144	490	570	285	85	690	150	820	-	42	5	36	M20	M24	SBDS 2248 E	
250	148	148	190	490	590	290	90	750	140	900	-	52	42	5	36	M20	M24	SBDS 3248 E
260	220	107	117	128	435	500	250	75	600	130	720	-	42	4	36	M16	M20	SBDS 3052 E
250	152	152	175	490	590	290	90	750	140	900	-	52	42	4	36	M20	M24	SBDS 3152 E
260	145	137	154	520	590	295	90	730	160	860	-	42	5	36	M20	M24	SBDS 2252 E	
290	167	158	205	535	625	310	95	800	160	960	-	65	42	5	36	M20	M24	SBDS 3252 E
280	240	117	122	128	455	520	260	80	630	140	760	-	42	5	36	M16	M20	SBDS 3056 E
250	157	165	175	510	590	290	90	750	140	900	-	65	42	5	36	M24	M24	SBDS 3156 E
270	152	147	158	555	630	315	95	770	170	900	-	42	5	36	M20	M24	SBDS 2256 E	
300	178	163	210	555	645	320	100	840	170	1000	-	65	42	5	36	M24	M30	SBDS 3256 E
300	250	122	132	144	500	570	285	85	690	150	820	-	42	5	36	M20	M24	SBDS 3060 E
300	162	167	190	550	655	320	100	840	170	1000	-	65	42	5	36	M24	M30	SBDS 3160 E
280	160	152	168	585	660	330	100	820	180	960	-	42	5	36	M20	M24	SBDS 2260 E	
330	182	187	230	600	705	350	105	920	180	1100	-	75	56	6	48	M24	M30	SBDS 3260 E
320	260	122	137	154	520	590	295	90	730	160	860	-	42	5	36	M20	M24	SBDS 3064 E
300	177	187	210	590	702	350	100	940	160	1150	-	65	42	5	36	M24	M30	SBDS 3164 E
320	175	167	180	640	720	360	110	900	200	1060	-	56	5	48	M24	M30	SBDS 2264 E	
360	192	187	250	640	760	370	115	960	200	1150	-	75	56	6	48	M24	M30	SBDS 3264 E

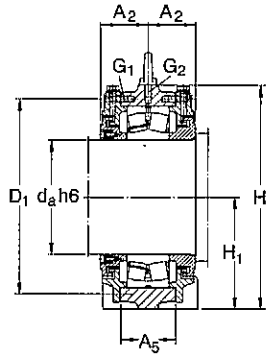
Shaft diameter d _a	Shaft abutment and fillet dimensions								Appropriate bearing	Masses Housing type		Adapter ring Designation	Dimensions		Grease quantity ¹⁾ Initial fill	
	B _c	G _a	G _h	d _{c min}	d _d	d _e	r _a	s _a		A	B		D ₂	b ₁	Housing type A	Housing type B
190	128	M12	20	215	160	205	8	12	23038 CC/W33	74,0	80,0	PSBD 190	225	20	1,10	1,00
172	M12	20	215	160	210	8	12	23138 CC/W33	146	160	PSBD 190	225	20	2,00	1,80	
160	M16	25	215	150	220	8	16	22238 CC/W33	126	135	PSBD 180	225	20	1,80	1,60	
197	M12	20	215	160	225	8	12	23238 CC/W33	170	185	PSBD 190	225	20	2,40	2,30	
200	135	M16	25	225	160	215	8	16	23040 CC/W33	83,0	90,0	PSBD 200	246	25	1,30	1,10
180	M12	20	225	170	220	8	12	23140 CC/W33	175	190	PSBD 200	246	25	2,40	2,10	
167	M20	30	225	150	235	8	20	22240 CC/W33	145	155	PSBD 200	246	25	2,00	1,80	
198	M16	25	225	160	240	8	16	23240 CC/W33	200	220	PSBD 200	246	25	2,60	2,50	
220	144	M16	25	245	180	240	8	16	23044 CC/W33	107	115	PSBD 220	266	25	1,70	1,50
191	M16	25	245	180	245	8	16	23144 CC/W33	205	220	PSBD 220	266	25	2,90	2,50	
175	M20	30	245	170	260	8	20	22244 CC/W33	187	200	PSBD 220	266	25	2,60	2,40	
216	M16	25	245	180	265	8	16	23244 CC/W33	270	290	PSBD 220	266	25	3,40	3,30	
240	145	M20	30	265	190	260	8	20	23048 CC/W33	120	130	PSBD 240	286	25	2,00	1,70
212	M16	25	265	200	265	8	16	23148 CC/W33	250	270	PSBD 240	286	25	3,40	3,00	
186	M20	30	265	190	285	8	20	22248 CC/W33	235	250	PSBD 240	286	25	3,60	3,40	
224	M16	25	265	200	290	8	16	23248 CC/W33	345	370	PSBD 240	286	25	4,30	4,00	
260	155	M20	30	285	210	285	8	20	23052 CC/W33	153	165	PSBD 260	306	25	2,50	2,30
220	M16	25	285	220	285	8	16	23152 CC/W33	300	320	PSBD 260	306	25	4,40	3,80	
205	M20	30	285	210	325	8	20	22252 CAC/W33	290	310	PSBD 260	306	25	4,10	3,80	
249	M16	25	285	220	335	8	16	23252 CAC/W33	435	470	PSBD 260	306	25	5,10	4,80	
280	166	M20	30	305	230	305	8	20	23056 CC/W33	177	190	PSBD 280	326	25	2,80	2,60
225	M16	25	305	240	305	8	16	23156 CC/W33	325	350	PSBD 280	326	25	4,80	4,20	
212	M21	35	305	220	345	8	24	22256 CAC/W33	330	350	PSBD 280	326	25	5,20	4,90	
261	M20	30	305	230	360	8	20	23256 CAC/W33	490	530	PSBD 280	326	25	5,50	5,00	
300	177	M20	30	325	250	325	8	20	23060 CC/W33	215	230	PSBD 300	350	30	3,70	3,30
237	M20	30	325	250	325	8	20	23160 CC/W33	400	430	PSBD 300	350	30	6,00	5,20	
225	M24	35	325	240	375	8	24	22260 CAC/W33	400	430	PSBD 300	350	30	5,80	5,50	
273	M20	30	325	250	380	8	20	23260 CAC/W33	590	640	PSBD 300	350	30	7,00	6,30	
320	179	M20	30	345	270	345	8	20	23064 CC/W33	240	255	PSBD 320	370	30	4,20	3,70
260	M20	30	345	270	350	8	20	23164 CC/W33	490	530	PSBD 320	370	30	7,50	6,40	
245	M24	35	345	260	400	8	24	22264 CAC/W33	485	520	PSBD 320	370	30	7,90	7,50	
291	M24	35	345	260	410	8	24	23264 CAC/W33	700	760	PSBD 320	370	30	8,20	7,30	

¹⁾ Based on 100 % filling

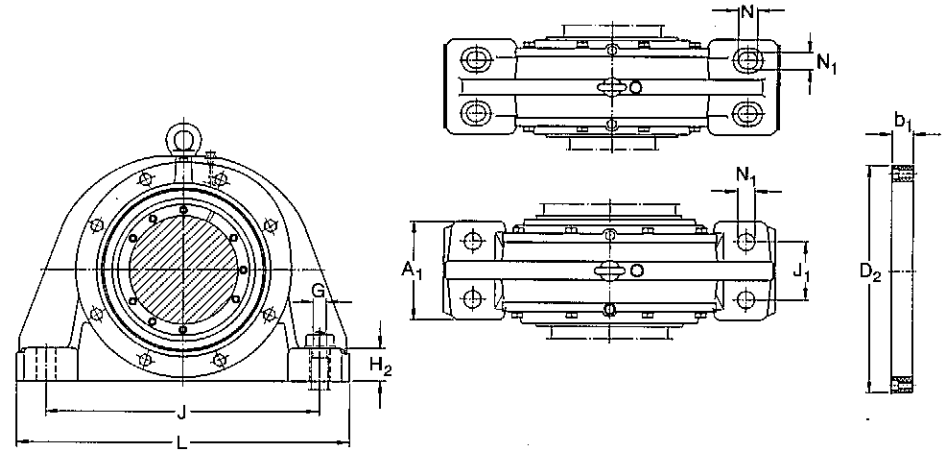
**SBD plummer block housings, E type,
for spherical roller bearings with cylindrical bore
on plain cylindrical shafts**
d_a 340–420 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft

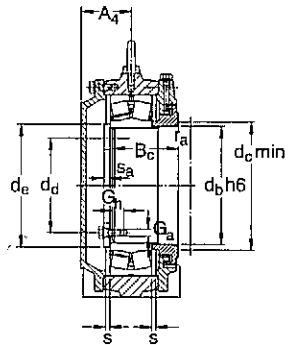


Shaft diameter d _a	Housing Dimensions										Designation							
	A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	G ₂	Housing of cast steel
mm	mm																	
340	270	132	147	158	565	630	315	95	770	170	900	-	42	6	36	M20	M24	SBDS 3068 E
	360	197	237	220	630	735	370	115	960	200	1150	75	56	6	48	M24	M30	SBDS 3168 E
	380	202	237	265	680	810	390	125	980	200	1200	75	60	6	56	M24	M36	SBDS 3268 E
360	280	132	152	168	585	660	330	100	820	180	960	-	42	6	36	M20	M24	SBDS 3072 E
	370	197	243	225	650	760	380	115	1000	200	1200	75	56	6	48	M24	M30	SBDS 3172 E
	400	227	247	275	710	825	410	130	1040	210	1280	80	68	7	64	M24	M36	SBDS 3272 E
380	300	137	157	168	605	680	340	105	840	190	1000	-	56	6	48	M20	M24	SBDS 3076 E
	380	202	254	230	680	790	390	125	1000	200	1200	75	60	6	56	M30	M30	SBDS 3176 E
	405	232	257	295	745	880	425	135	1100	225	1350	85	68	7	64	M30	M36	SBDS 3276 E
400	320	142	167	180	650	720	360	110	900	200	1060	-	56	6	48	M24	M30	SBDS 3080 E
	400	197	247	235	710	845	410	130	1040	210	1280	80	68	7	64	M30	M36	SBDS 3180 E
	450	242	257	300	790	905	450	145	1160	240	1430	85	68	7	64	M30	M36	SBDS 3280 E
420	340	147	167	180	670	750	375	115	940	210	1100	-	56	6	48	M24	M30	SBDS 3084 E
	420	212	257	260	760	900	450	135	1100	210	1350	85	68	7	64	M30	M36	SBDS 3184 E
	470	252	267	315	835	955	470	150	1220	255	1500	90	72	8	64	M30	M36	SBDS 3284 E

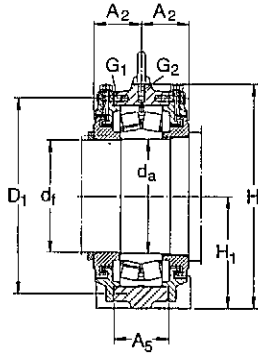
Shaft diameter d _a	Shaft abutment and fillet dimensions								Appropriate bearing	Masses Housing type		Adapter ring Designation	Dimensions		Grease quantity ¹⁾ Initial fill	
	B _c	G _a	G _h	d _c min	d _d	d _e	r _a	s _a		A	B		D ₂	b ₁	Housing type A	Housing type B
mm	mm									kg			mm		kg	
340	194	M 24	35	365	280	370	8	24	23068 CC/W33	280	305	PSBD 340	390	30	5,20	4,70
	287	M 24	35	365	280	370	8	24	23168 CC/W33	590	630	PSBD 340	390	30	10,0	8,20
	308	M 24	35	365	280	435	8	24	23268 CA/W33	830	900	PSBD 340	390	30	9,90	8,80
360	194	M 24	35	385	300	390	8	24	23072 CC/W33	315	340	PSBD 360	410	30	6,10	5,40
	288	M 24	35	385	300	390	8	24	23172 CAC/W33	660	700	PSBD 360	410	30	11,8	9,30
	337	M 24	35	385	300	455	8	24	23272 CA/W33	950	1020	PSBD 360	410	30	12,0	10,5
380	200	M 24	35	405	320	410	8	24	23076 CC/W33	350	380	PSBD 380	430	30	6,90	6,00
	294	M 24	35	405	320	410	8	24	23176 CA/W33	730	770	PSBD 380	430	30	13,8	10,8
	346	M 30	45	405	305	480	8	30	23276 CA/W33	1060	1140	PSBD 380	430	30	14,5	12,5
400	211	M 24	35	425	340	430	8	24	23080 CAC/W33	420	450	PSBD 400	450	30	8,20	7,30
	291	M 24	35	425	340	430	8	24	23180 CA/W33	820	870	PSBD 400	450	30	15,5	12,5
	364	M 30	45	425	325	505	8	30	23280 CA/W33	1240	1330	PSBD 400	450	30	18,0	16,0
420	217	M 30	40	445	345	450	8	30	23084 CA/W33	465	500	PSBD 420	470	30	8,90	7,90
	318	M 30	45	445	345	450	8	30	23184 C/W33	1000	1070	PSBD 420	470	30	18,0	15,0
	380	M 30	45	445	345	535	8	30	23284 CA/W33	1500	1600	PSBD 420	470	30	23,0	20,5

¹⁾ Based on 100 % filling

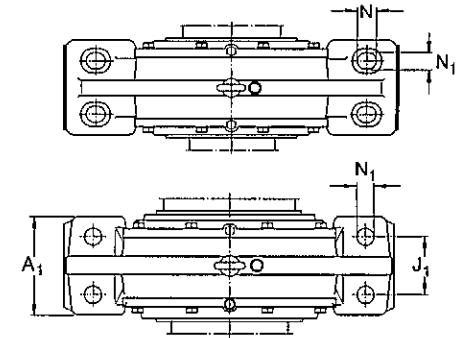
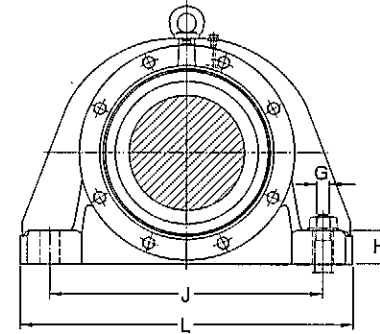
**SBD plummer block housings, G type,
for spherical roller bearings with cylindrical bore
on stepped cylindrical shafts**
d_a 100–180 mm



Type AL
Non-locating bearing
Housing for shaft end



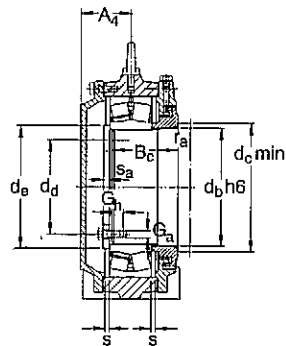
Type BF
Locating bearing
Housing for through shaft



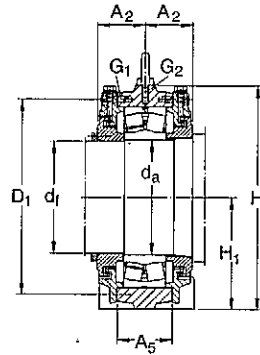
Shaft diameter d _a	Housing Dimensions										Shaft abutment and fillet dimensions										Appropriate bearing	Masses Housing type		Grease quantity ¹⁾ Initial fill														
	A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	G ₂	B _b	B _c	G _a		G _h	d _b	d _c min	d _d	d _e	d _f	r _a	s _a	A	B	A	B					
mm	mm										mm										kg		kg															
100	110	70	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 2220 G																				
110	150	81	83	80	215	270	130	40	300	80	400	35	25	2	20	M 12	M 12	SBDS 3122 G																				
	120	78	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 2222 G																				
	130	91	76	90	230	285	140	42	350	70	440	35	30	2	24	M 8	M 16	SBDS 3222 G																				
120	110	63	63	56	195	230	115	35	300	60	370	-	24	2	20	M 8	M 12	SBDS 3024 G																				
	140	76	78	85	230	285	140	40	330	80	410	35	25	2	20	M 12	M 12	SBDS 3124 G																				
	130	80,5	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 2224 G																				
	140	93	78	95	245	305	150	42	370	75	470	35	30	2	24	M 12	M 16	SBDS 3224 G																				
130	120	68	68	64	215	260	130	38	340	60	410	-	24	2	20	M 8	M 12	SBDS 3026 G																				
	140	80	80	90	240	295	145	40	350	80	430	35	25	2	20	M 12	M 12	SBDS 3126 G																				
	140	88	70	70	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 2226 G																				
	150	103	78	100	260	325	160	45	400	85	500	40	30	2	24	M 12	M 16	SBDS 3226 G																				
140	130	68	68	70	230	275	140	40	360	70	430	-	28	3	24	M 8	M 12	SBDS 3028 G																				
	150	85	85	95	260	315	155	45	380	85	470	35	25	2	20	M 12	M 12	SBDS 3128 G																				
	160	94	83	82	275	330	165	50	420	95	510	-	35	3	30	M 10	M 12	SBDS 2228 G																				
	160	108	88	110	285	350	170	50	430	85	530	40	30	3	24	M 16	M 20	SBDS 3228 G																				
150	140	73	70	76	245	290	145	42	370	80	455	-	28	3	24	M 10	M 12	SBDS 3030 G																				
	200	93	93	102	285	345	170	60	450	110	580	45	35	3	24	M 12	M 16	SBDS 3130 G																				
	170	98	88	90	300	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 2230 G																				
	170	113	93	120	305	375	180	54	450	90	550	45	35	3	30	M 16	M 20	SBDS 3230 G																				
160	150	78	76	76	260	310	155	45	390	90	480	-	28	3	24	M 10	M 12	SBDS 3032 G																				
	200	98	98	110	310	368	180	55	430	110	540	40	30	3	24	M 12	M 16	SBDS 3132 G																				
	180	101	88	96	315	370	185	55	480	105	570	-	35	3	30	M 12	M 16	SBDS 2232 G																				
	180	118	98	130	330	395	190	58	490	105	600	45	35	3	30	M 16	M 20	SBDS 3232 G																				
170	160	78	83	82	280	330	165	50	420	95	510	-	35	3	30	M 10	M 12	SBDS 3034 G																				
	200	113	112	120	330	395	190	60	470	110	570	45	35	3	30	M 12	M 20	SBDS 3134 G																				
	190	112,5	97	104	335	400	200	60	510	110	600	-	35	4	30	M 12	M 16	SBDS 2234 G																				
	200	128	103	135	345	410	200	62	525	110	640	45	35	3	30	M 16	M 20	SBDS 3234 G																				
180	170	83	88	90	305	360	180	52	450	100	540	-	35	3	30	M 12	M 16	SBDS 3036 G																				
	200	118	116	125	350	410	200	60	490	105	600	45	35	3	30	M 16	M 20	SBDS 3136 G																				
	200	118	102	110	360	430	215	65	540	115	640	-	42	4	36	M 16	M 20	SBDS 2236 G																				
	210	133	108	140	360	430	210	65	550	120	680	45	35	3	30	M 16	M 20	SBDS 3236 G																				

Shaft diameter d _a	Housing Dimensions										Shaft abutment and fillet dimensions										Appropriate bearing	Masses Housing type		Grease quantity ¹⁾ Initial fill													
	A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	G ₂	B _b	B _c	G _a		G _h	d _b	d _c min	d _d	d _e	d _f	r _a	s _a	A	B	A	B				
mm	mm										mm										kg		kg														
100	35	90	M 10	18	102	115	75	115	98	4	10	22220 E																									
110	30	107	M 8	15	112	125	90	122	108	4	8	23122 CC/W33	40,0	45,0	0,40	0,30																					
	35	102	M 10	18	112	125	85	128	108	4	10	22222 E	37,0	40,0	1,00	0,50																					
	32	123	M 8	15	112	125	90	135	108	4	8	23222 CC/W33	46,0	50,0	0,60	0,50																					
120	25	84	M 10	18	122	135	95	132	118	4	10	23024 CC/W33	19,0	20,0	0,40	0,30																					
	30	105	M 8	15	122	135	100	133	118	4	8	23124 CC/W33	45,0	50,0	0,50	0,40																					
	35	107	M 10	18	122	135	95	138	118	4	10	22224 E	43,0	46,0	1,00	0,50																					
	32	128	M 10	18	122	135	95	145	118	4	10	23224 CC/W33	50,0	55,0	0,80	0,70																					
130	25	92	M 10	18	132	150	105	145	128	6	10	23026 CC/W33	28,0	30,0	0,50	0,40																					
	30	110	M 8	15	132	150	110	145	128	6	8	23126 CC/W33	50,0	55,0	0,50	0,50																					

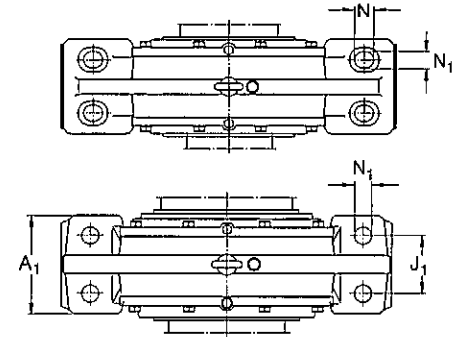
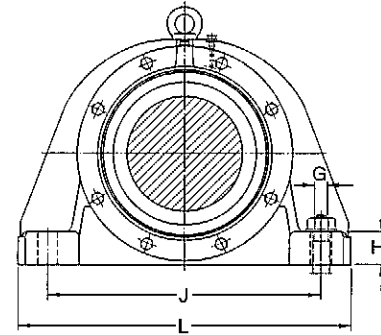
**SBD plummer block housings, G type,
for spherical roller bearings with cylindrical bore
on stepped cylindrical shafts**
 d_a 190–320 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft



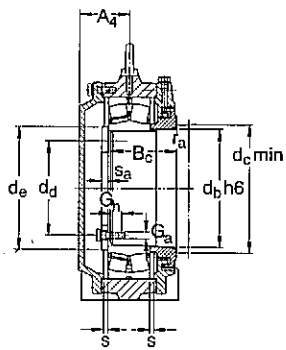
Shaft diameter d_a	Housing Dimensions					Shaft abutment and fillet dimensions													Designation Housing of cast steel
	A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L	N	N_1	s	G	G_1	G_2		
mm	mm					mm													
190	180	93	88	96	315	370	185	55	480	105	570	—	35	3	30	M12	M16	SBDS 3038 G	
	210	123	120	130	370	435	210	65	550	120	680	—	42	4	36	M16	M20	SBDS 3138 G	
	200	118	102	110	370	430	215	65	540	115	640	—	42	4	36	M16	M20	SBDS 2238 G	
	220	136	113	150	385	455	220	75	560	120	710	45	35	4	30	M16	M20	SBDS 3238 G	
200	190	97	97	104	340	400	200	60	510	110	600	—	35	4	30	M12	M16	SBDS 3040 G	
	220	127	127	135	380	455	220	85	560	120	710	52	42	3	36	M16	M24	SBDS 3140 G	
	210	122	107	118	390	450	225	70	560	120	680	—	42	4	36	M16	M20	SBDS 2240 G	
	240	138	118	165	405	475	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3240 G	
220	200	102	102	110	370	430	215	65	540	115	640	—	42	4	36	M16	M20	SBDS 3044 G	
	230	135	135	150	420	485	235	75	640	140	780	52	42	4	36	M16	M24	SBDS 3144 G	
	220	124,5	117	128	435	500	250	75	600	130	720	—	42	4	36	M16	M20	SBDS 2244 G	
	250	148	133	175	445	525	260	80	700	140	850	52	42	4	36	M20	M24	SBDS 3244 G	
240	210	102	107	118	390	450	225	70	560	120	680	—	42	4	36	M16	M20	SBDS 3048 G	
	250	152	142	160	455	550	270	80	720	140	890	52	42	4	36	M20	M24	SBDS 3148 G	
	250	130	132	144	490	570	285	85	690	150	820	—	42	5	36	M20	M24	SBDS 2248 G	
	250	148	148	190	490	590	290	90	750	140	900	52	42	5	36	M20	M24	SBDS 3248 G	
260	220	107	117	128	435	500	250	75	600	130	720	—	42	4	36	M16	M20	SBDS 3052 G	
	250	152	152	175	490	590	290	90	750	140	900	52	42	4	36	M20	M24	SBDS 3152 G	
	260	145	137	154	520	590	295	90	730	160	860	—	42	5	36	M20	M24	SBDS 2252 G	
	290	167	158	205	535	625	310	95	800	160	960	65	42	5	36	M20	M24	SBDS 3252 G	
280	240	117	122	128	455	520	260	80	630	140	760	—	42	5	36	M16	M20	SBDS 3056 G	
	250	157	165	175	510	590	290	90	750	140	900	65	42	5	36	M24	M24	SBDS 3156 G	
	270	152	147	158	555	630	315	95	770	170	900	—	42	5	36	M20	M24	SBDS 2256 G	
	300	178	163	210	555	645	320	100	840	170	1 000	65	42	5	36	M24	M30	SBDS 3256 G	
300	250	122	132	144	500	570	285	85	690	150	820	—	42	5	36	M20	M24	SBDS 3060 G	
	300	162	167	190	550	655	320	100	840	170	1 000	65	42	5	36	M24	M30	SBDS 3160 G	
	280	160	152	168	585	660	330	100	820	180	960	—	42	5	36	M20	M24	SBDS 2260 G	
	330	182	187	230	600	705	350	105	920	180	1 100	75	56	6	48	M24	M30	SBDS 3260 G	
320	260	122	137	154	520	590	295	90	730	160	860	—	42	5	36	M20	M24	SBDS 3064 G	
	300	177	187	210	590	702	350	100	940	160	1 150	65	42	5	36	M24	M30	SBDS 3164 G	
	320	175	167	180	640	720	360	110	900	200	1 060	—	56	5	48	M24	M30	SBDS 2264 G	
	360	192	187	250	640	760	370	115	960	200	1 150	75	56	6	48	M24	M30	SBDS 3264 G	

Shaft diameter d_a	Shaft abutment and fillet dimensions													Appropriate bearing	Masses Housing type		Grease quantity ¹⁾ Initial fill	
	B_b	B_c	G_a	G_h	d_b	d_c min	d_d	d_e	d_f	r_a	s_a	A	B		A	B		
mm	mm													—	kg		kg	
190	30	128	M12	20	192	215	160	205	188	8	12	23038	CC/W33	74,0	80,0	1,10	1,00	
	40	172	M12	20	192	215	160	210	188	8	12	23138	CC/W33	146	160	2,00	1,80	
	45	160	M16	25	192	215	150	220	188	8	16	22238	CC/W33	126	135	1,80	1,60	
	45	197	M12	20	192	215	160	225	188	8	12	23238	CC/W33	170	185	2,40	2,30	
200	35	135	M16	25	202	225	160	215	198	8	16	23040	CC/W33	83,0	90,0	1,30	1,10	
	40	180	M12	20	202	225	170	220	198	8	12	23140	CC/W33	175	190	2,40	2,10	
	45	167	M20	30	202	225	150	235	198	8	20	22240	CC/W33	145	155	2,00	1,80	
	45	198	M16	25	202	225	160	240	198	8	16	23240	CC/W33	200	220	2,60	2,50	
220	35	144	M16	25	222	245	180	240	218	8	16	23044	CC/W33	107	115	1,70	1,50	
	45	191	M16	25	222	245	180	245	218	8	16	23144	CC/W33	205	220	2,90	2,50	
	45	175	M20	30	222	245	170	260	218	8	20	22244	CC/W33	187	200	2,60	2,40	
	45	216	M16	25	222	245	180	265	218	8	16	23244	CC/W33	270	290	3,40	3,30	
240	35	145	M20	30	242	265	190	260	238	8	20	23048	CC/W33	120	130	2,00	1,70	
	50	212	M16	25	242	265	200	265	238	8	16	23148	CC/W33	250	270	3,40	3,00	
	45	186	M20	30	242	265	190	285	238	8	20	22248	CC/W33	235	250	3,60	3,40	
	45	224	M16	25	242	265	200	290	238	8	16	23248	CC/W33	345	370	4,30	4,00	
260	35	155	M20	30	262	285	210	285	258	8	20	23052	CC/W33	153	165	2,50	2,30	
	50	220	M16	25	262	285	220	285	258	8	16	23152	CC/W33	300	320	4,40	3,80	
	50	205	M20	30	262	285	210	325	258	8	20	22252	CAC/W33	290	310	4,10	3,80	
	45	249	M16	25	262	285	220	335	258	8	16	23252	CAC/W33	435	470	5,10	4,80	
280	35	166	M20	30	282	305	230	305	278	8	20	23056	CC/W33	177	190	2,80	2,60	
	50	225	M16	25	282	305	240	305	278	8	16	23156	CC/W33	325	350	4,80	4,20	
	50	212	M24	35	282	305	220	345	278	8	24	22256	CAC/W33	330	350	5,20	4,90	
	50	261	M20	30	282	305	230	380	278	8	20	23256	CAC/W33	490	530	5,50	5,00	
300	35	177	M20	30	302	325	250	325	298	8	20	23060	CC/W33	215	230	3,70	3,30	
	50	237	M20	30	302	325	250	325	298	8	20	23160	CC/W33	400	430	6,00	5,20	
	50	225	M24	35	302	325	240	375	298	8	24	22260	CAC/W33	400	430	5,80	5,50	
	50	273	M20	30	302	325	250	380	298	8	20	23260	CAC/W33	590	640	7,00	6,30	
320	35	179	M20	30	322	345	270	345	318	8	20	23064	CC/W33	240	255	4,20	3,70	
	50	260	M20	30	322	345	270	350	318	8	20	23164	CC/W33	490	530	7,50	6,40	
	55	245	M24	35	322	345	260	400	318	8	24	22264	CAC/W33	485	520	7,90	7,50	
	50	291	M24	35	322	345	260	410	318	8	24	23264	CAC/W33	700	760	8,20	7,30	

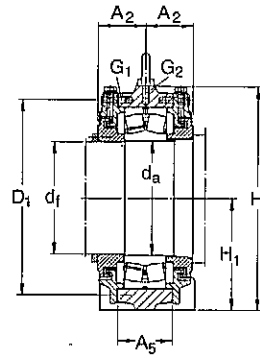
¹⁾ Based on 100 % filling

**SBD plummer block housings, G type,
for spherical roller bearings with cylindrical bore
on stepped cylindrical shafts**

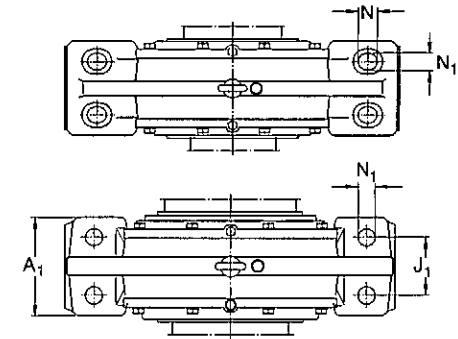
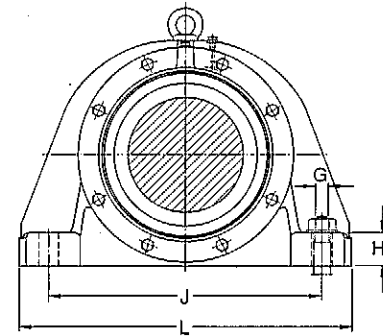
d_a 340–420 mm



Type AL
Non-locating bearing
Housing for shaft end



Type BF
Locating bearing
Housing for through shaft



Shaft diameter d_a	Housing Dimensions											Designation Housing of cast steel						
	A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L		N	N_1	s	G	G_1	G_2
mm	mm																	
340	270	132	147	158	565	630	315	95	770	170	900	-	42	6	36	M 20	M 24	SBDS 3068 G
	360	197	237	220	630	735	370	115	960	200	1 150	75	56	6	48	M 24	M 30	SBDS 3168 G
	380	202	237	265	680	810	390	125	980	200	1 200	75	60	6	56	M 24	M 36	SBDS 3268 G
360	280	132	152	168	585	660	330	100	820	180	960	-	42	6	36	M 20	M 24	SBDS 3072 G
	370	197	243	225	650	760	380	115	1 000	200	1 200	75	56	6	48	M 24	M 30	SBDS 3172 G
	400	227	247	275	710	825	410	130	1 040	210	1 280	80	68	7	64	M 24	M 36	SBDS 3272 G
380	300	137	157	168	605	680	340	105	840	190	1 000	-	56	6	48	M 20	M 24	SBDS 3076 G
	380	202	254	230	680	790	390	125	1 000	200	1 200	75	60	6	56	M 30	M 30	SBDS 3176 G
	405	232	257	295	745	880	425	135	1 100	225	1 350	85	68	7	64	M 30	M 36	SBDS 3276 G
400	320	142	167	180	650	720	360	110	900	200	1 060	-	56	6	48	M 24	M 30	SBDS 3080 G
	400	197	247	235	710	845	410	130	1 040	210	1 280	80	68	7	64	M 30	M 36	SBDS 3180 G
	450	242	257	300	790	905	450	145	1 160	240	1 430	85	68	7	64	M 30	M 36	SBDS 3280 G
420	340	147	167	180	670	750	375	115	940	210	1 100	-	56	6	48	M 24	M 30	SBDS 3084 G
	420	212	257	260	760	900	450	135	1 100	210	1 350	85	68	7	64	M 30	M 36	SBDS 3184 G
	470	252	267	315	835	955	470	150	1 220	255	1 500	90	72	8	64	M 30	M 36	SBDS 3284 G

Shaft diameter d_a	Shaft abutment and fillet dimensions											Appropriate bearing	Masses Housing type		Grease quantity ¹⁾ Initial fill	
	B_b	B_c	G_a	G_h	d_b	d_c min	d_d	d_e	d_f	r_a	s_a		A	B	A	B
mm	mm												kg		kg	
340	40	194	M 24	35	342	365	280	370	338	8	24	23068 CC/W33	280	305	5,20	4,70
	60	287	M 24	35	342	365	280	370	338	8	24	23168 CC/W33	590	630	10,0	8,20
	50	308	M 24	35	342	365	280	435	336	8	24	23268 CA/W33	830	900	9,90	8,80
360	40	194	M 24	35	362	385	300	390	358	8	24	23072 CC/W33	315	340	6,10	5,40
	60	288	M 24	35	362	385	300	390	358	8	24	23172 CAC/W33	660	700	11,8	9,30
	70	337	M 24	35	362	385	300	455	358	8	24	23272 CA/W33	950	1 020	12,0	10,5
380	40	200	M 24	35	382	405	320	410	378	8	24	23076 CC/W33	350	380	6,90	6,00
	60	294	M 24	35	382	405	320	410	378	8	24	23176 CA/W33	730	770	13,8	10,8
	70	346	M 30	45	382	405	305	480	378	8	30	23276 CA/W33	1 060	1 140	14,5	12,5
400	40	211	M 24	35	402	425	340	430	398	8	24	23080 CAC/W33	420	450	8,20	7,30
	60	291	M 24	35	402	425	340	430	398	8	24	23180 CA/W33	820	870	15,5	12,5
	70	364	M 30	45	402	425	325	505	398	8	30	23280 CA/W33	1 240	1 330	18,0	16,0
420	40	217	M 30	40	422	445	345	450	418	8	30	23084 CA/W33	465	500	8,90	7,90
	60	318	M 30	45	422	445	345	450	418	8	30	23184 CA/W33	1 000	1 070	18,0	15,0
	70	380	M 30	45	422	445	345	535	418	8	30	23284 CA/W33	1 500	1 600	23,0	20,5

¹⁾ Based on 100 % filling