

Non-split plummer block housings and take-up housings SBD and THD series

Bearing types

- Spherical roller bearings
- CARB toroidal roller bearings (optional)

Bearing dimension series

- 22, 30, 31, 32

Shaft diameter range

- 60 to 420 mm (SBD)
- 50 to 400 mm (THD)

Typical shaft-bearing combinations

- Plain shaft with bearing on an adapter sleeve (SBD and THD)
- Stepped shaft with bearing on an adapter sleeve (SBD)
- Stepped shaft with bearing on a cylindrical seat (SBD)
- Multi-stepped shaft with bearing on a cylindrical seat (SBD)

Seals

- Labyrinth
- Heavy-duty (optional)

Lubrication

- Grease

Materials

- Spheroidal graphite cast iron
- Cast steel (optional)
- Grey cast iron (optional)

Mounting

- Four-bolt mounting (SBD)

Compliance to standards

- Not standardized

SBD plummer (pillow) block housings and THD take-up housings are non-split housings designed to accommodate heavy loads acting in different directions. These types of loads are typically encountered in conveyors, roller beds and crushers. Highly reliable bearing arrangements can be designed using SBD or THD housings together with SKF Explorer bearings. In conveyors, SBD and THD housings are often used together.

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Designations

Designation system for SBD plummer block housings and THD take-up housings

SBDD 2226 CAF

Series

SBD Standard non-split plummer block housing
THD Standard non-split take-up housing

Material

D Spheroidal graphite cast iron
S Cast steel
C Grey cast iron

Size identification

22(00) Housing for bearings in the 22 series
30(00) Housing for bearings in the 30 series
31(00) Housing for bearings in the 31 series
32(00) Housing for bearings in the 32 series
(00) Size code of the bearing, (00) × 5 = bearing bore diameter [mm]

Suffixes¹⁾

- Housing for bearings on an adapter sleeve on plain shafts
C SBD housing for bearings on an adapter sleeve on stepped shafts
E SBD housing for bearings on a cylindrical seat on stepped shafts
G SBD housing for bearings on a cylindrical seat on multi-stepped shafts
A Housing for shaft end, one side closed
B Housing for through shaft
F Housing for a locating bearing position
L Housing for a non-locating bearing position

¹⁾ When multiple suffixes are used, they are listed in the same order as shown here.

Designation system for adapter rings

PSBD 115

Series

PSBD Adapter ring for labyrinth seal

Size identification

... Shaft diameter [mm]

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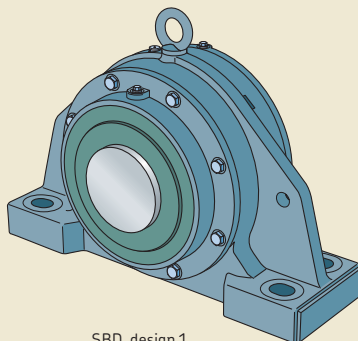
Standard housing design

SBD plummer (pillow) block housings and THD take-up housings are non-split housings. They consist of a housing body and two covers. The covers are bolted to the body with six or eight bolts. SBD and THD housings are supplied with different covers depending on the shaft-bearing combination (→ **page 493**).

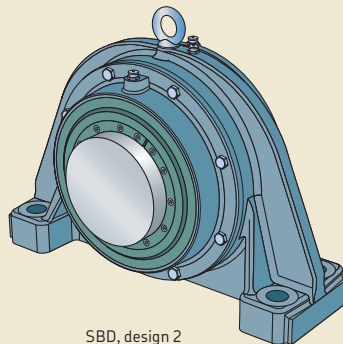
SBD housings are available in two designs (→ **fig. 1**), depending on the housing size. The main difference is the holes for the attachment bolts: one design has cast oblong holes, the other has drilled holes. Other design differences include the overall shape of the housing and the thickness of the reinforcement ribs.

THD housings have a special take-up design to maintain tension on a conveyor belt (→ **fig. 2**). SKF does not supply the frames.

Fig. 1

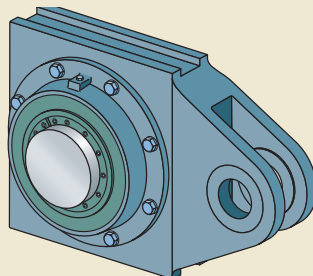


SBD, design 1



SBD, design 2

Fig. 2



THD

Features and benefits

Standard SBD plummer block housings and THD take-up housings share some of the following features:

Stiff housing

Non-split housings provide a high degree of stiffness and can accommodate heavy radial loads in all directions.

Narrow width

SBD plummer block housings and THD take-up housings are narrow and can be used where space is limited (→ fig. 3).

Machined base ends

SBD housings have machined base ends to make alignment easier and provide good contact with stops when stops are used to accommodate loads parallel to the support surface (→ fig. 4).

Eye bolts

With the exception of the smallest housing (SBD 2213) all SBD plummer block housings have an eye bolt for safe and easy handling.

Housing material

Standard SBD plummer block housings and THD take-up housing bodies are made of spheroidal graphite cast iron (series designation SBDD or THDD). Covers are made of grey cast iron.

Paint, corrosion protection

SBD plummer block housings and THD take-up housings are painted blue (RAL 5007) using a solvent based alkyd/acryl paint. The paint protects the housing in accordance with ISO 12944-2, corrosivity category C2 (i.e. exterior atmospheres with low level of pollution, interior atmospheres where condensation may occur). The paint is not affected by most lubricating oils, cutting fluids or alkaline washing chemicals. Housings can be repainted with most water or solvent based 1- or 2-component paints.

Unpainted surfaces are protected by a solventless rust inhibitor.

Fig. 3

Narrow width

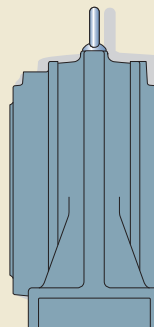
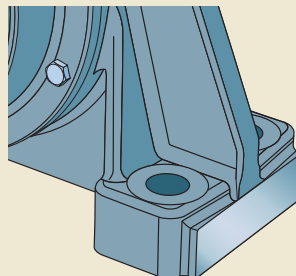


Fig. 4

Machined base ends



Dimension standards

The dimensions of SBD and THD housings are not standardized either nationally or internationally.

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Housing variants

The following housing variants can be supplied on request:

- SBD or THD housings for CARB toroidal roller bearings
- SBD housings for bearings on a withdrawal sleeve
- Housings with taconite heavy-duty seals
- Housings made of cast steel (series designation SBDS or THDS)
- Housings made of grey cast iron (series designation SBDC or THDC)

For additional information about these variants, contact the SKF application engineering service.

Sealing solutions

SBD plummer (pillow) block housings and THD take-up housings are supplied with labyrinth seals as standard. They can also be used with sealed spherical roller bearings, and variants are available for taconite heavy-duty seals.

Standard seals

The labyrinth seal consists of a labyrinth ring made of grey cast iron, mounted on the shaft, which forms a multi-stage axial labyrinth with the seal grooves in the housing cover. The

number of stages in the labyrinth ring varies with housing size.

In THD take-up housings, the labyrinth rings are locked on the shaft with adapter rings. In SBD plummer block housings, the labyrinth rings are locked in different ways depending on the housing type:

- fixed with an adapter ring (→ **fig. 5a**)
- clamped between the bearing and a shaft shoulder (→ **fig. 5b**)
- clamped between the bearing or the lock nut and another component on the shaft (→ **fig. 5c**)

The product tables show how the labyrinth rings are locked for the different housing designs. Adapter rings are supplied with the housing when needed. The adapter ring is identified by the prefix PSBD followed by the size (shaft diameter) in millimeters uncoded, e.g. PSBD 170. Adapter rings are listed in **table 1**.

In typical applications, the bearing and housing are completely filled with grease. Excess grease enters the labyrinths and improves the sealing effect. Most THD take-up housings and SBD plummer block housings have ducts to supply grease directly to the seals.

Seal characteristics are listed in **table 2**.

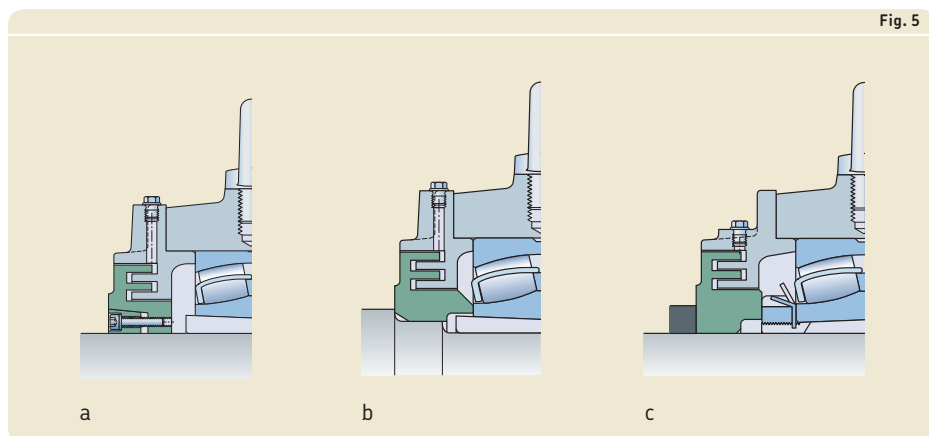
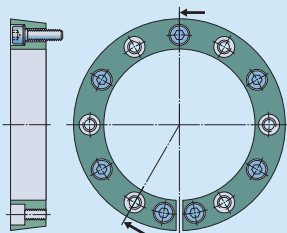


Fig. 5

Table 1

Adapter rings for SBD plummer block housings and THD take-up housings



Adapter ring	Adapter ring bolts	
	Size	Tightening torque
-	-	Nm
PSBD 50	M 3	1
PSBD 55	M 3	1
PSBD 60	M 4	2
PSBD 70	M 5	4
PSBD 80	M 5	4
PSBD 90	M 5	4
PSBD 100	M 5	4
PSBD 110	M 5	4
PSBD 115	M 5	4
PSBD 120	M 5	4
PSBD 125	M 5	4
PSBD 130	M 5	4
PSBD 135	M 6	7
PSBD 140	M 6	7
PSBD 150	M 6	7
PSBD 160	M 6	7
PSBD 170	M 6	7
PSBD 180	M 6	7
PSBD 190	M 6	7
PSBD 200	M 8	10
PSBD 220	M 8	10
PSBD 240	M 8	10
PSBD 260	M 8	10
PSBD 280	M 8	10
PSBD 300	M 8	10
PSBD 320	M 8	10
PSBD 340	M 10	12
PSBD 360	M 10	12
PSBD 380	M 10	12
PSBD 400	M 10	12
PSBD 420	M 10	12

Table 2

Labyrinth seals for SBD plummer block and THD take-up housings

Material labyrinth ring	Cast iron
adapter ring	Fabric reinforced phenolic resin

Application conditions and requirements

Temperature with adapter ring	-30 to +100 °C (-20 to +210 °F)
without adapter ring	-50 to +200 °C (-60 to +390 °F)
Max. circumferential speed [m/s]	not limited
Max. misalignment [°]	0,3
Low friction	++
Axial shaft displacement	listed in the product tables
Shaft tolerance class	see <i>Shaft specifications</i> , page 495
Shaft roughness R _a [µm]	≤ 3,2

Sealing suitability

Dust	+
Fine particles	+
Coarse particles	+
Chips	++
Liquids when sprayed	--
Direct sunlight	++

Symbols: ++ very suitable
+ suitable
-- not suitable

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Using sealed bearings

Using sealed bearings in housings with standard seals is a good solution for highly contaminated environments. The sealed bearing together with the housing seal and grease provide three layers of protection (→ *SKF three-barrier solution*, **page 39**). SBD plummer block housings and THD take-up housings can, in most cases, be used together with self-aligning sealed SKF bearings. When using taconite heavy-duty seals, a sealed bearing does not enhance the sealing effect during operation, but still protects the bearing against contaminants during mounting. For additional information, contact the SKF application engineering service.

Special seals

SBD plummer block housings and THD take-up housings are available with taconite heavy-duty seals. Taconite heavy-duty seals are grease filled labyrinth seals that include a V-ring. They can seal against taconite, a very fine-grained mineral which is extremely difficult to seal against.

Taconite seals require a modified housing, designation suffix /VZ335. For additional information, contact the SKF application engineering service.

Design considerations

For general information about system design, refer to the following sections:

- *Typical shaft-bearing combinations* (→ page 41)
- *Locating/non-locating bearing systems* (→ page 40)
- *Load carrying ability* (→ page 44)
- *Axial load carrying ability for bearings on sleeves* (→ page 44)
- *Specifications for shafts and housing support surfaces* (→ page 45)

For additional information about rolling bearings and adapter sleeves, refer to the product information available online at skf.com/ bearings.

Typical shaft-bearing combinations

SBD plummer block housings can accommodate different shaft-bearing combinations (→ fig. 6):

- Plain shaft with bearing on an adapter sleeve, no designation suffix
- Stepped shaft with bearing on an adapter sleeve, designation suffix C
- Stepped shaft with bearing on a cylindrical seat, designation suffix E
- Multi-stepped shafts with bearings on a cylindrical seat, designation suffix G

THD take-up housings are available for bearings on an adapter sleeve on plain shafts (→ fig. 7).

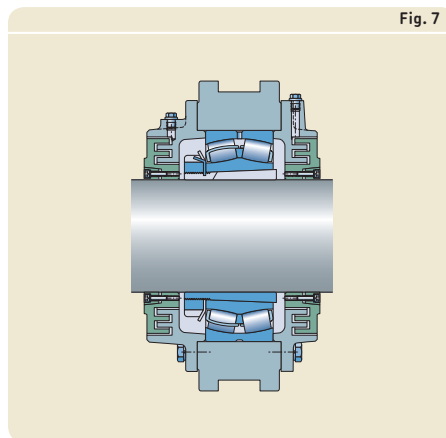


Fig. 7

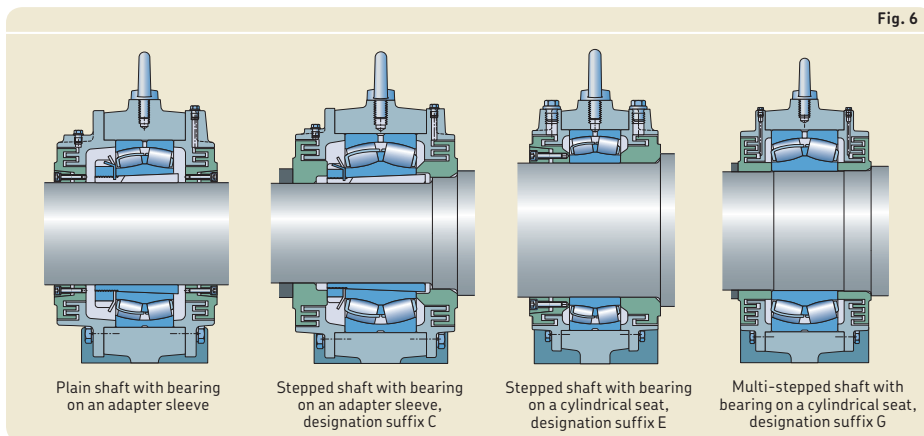
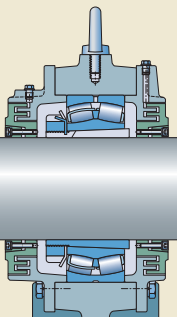
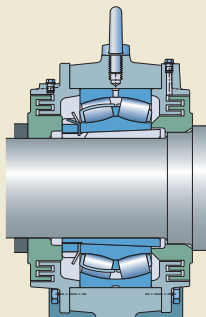


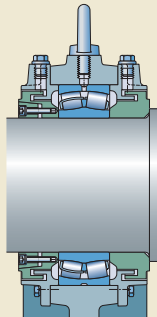
Fig. 6



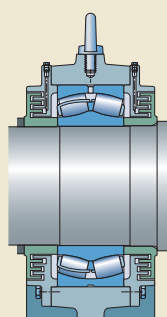
Plain shaft with bearing on an adapter sleeve



Stepped shaft with bearing on an adapter sleeve, designation suffix C



Stepped shaft with bearing on a cylindrical seat, designation suffix E



Multi-stepped shaft with bearing on a cylindrical seat, designation suffix G

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End plates to secure a bearing on a cylindrical seat at the end of a shaft (→ **fig. 8**) are not supplied by SKF. Suitable dimensions for end plates are provided in the product tables.

SBD and THD housing bodies are supplied with different covers to fit the following shaft arrangements:

- housing for a shaft end, designation suffix A
- housing for a through shaft, designation suffix B
- housing for a locating bearing, designation suffix F
- housing for a non-locating bearing, designation suffix L

When ordering, the suffixes should be combined; see the order example on **page 501**.

Locating and non-locating bearing positions

SBD plummer block housings and THD take-up housings can be used for both the locating and non-locating bearing positions. The housing covers determine the width of the bearing seat. For a locating bearing, the covers provide a bearing seat that is the same width as the bearing (designation suffix F). For the non-locating bearing, the covers provide a bearing seat that is wider than the bearing (designation suffix L). The permissible axial displacement of the bearing is listed in the product tables (parameter "s").

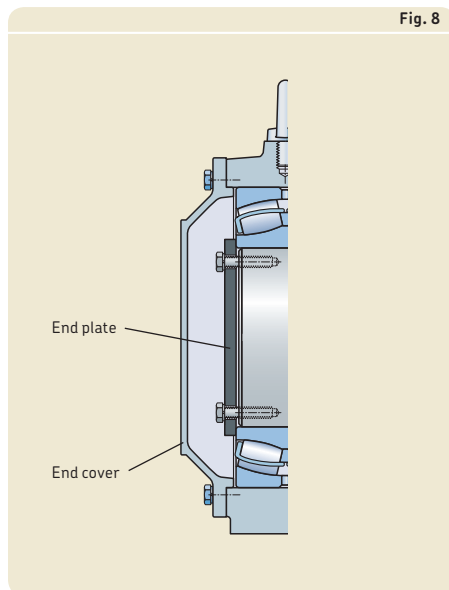
Load carrying ability

SBD plummer block housings and THD take-up housings are designed to accommodate radial loads acting in all directions as well as axial loads acting in both directions on the locating bearing position.

For SBD housings, the permissible radial loads depend on the bearing, the housing and the attachment bolts. Loads acting perpendicularly to the support surface are limited only by the bearing. SBD housings must be supported over the entire base area.

For information on the load carrying ability of THD take-up housings, contact SKF application engineering service.

Fig. 8



Breaking loads and safety factors

Guideline values for the breaking loads of housings made of spheroidal graphite cast iron are provided in **table 3** on **page 496**. To obtain the permissible load for a housing, the appropriate breaking load value should be divided by a factor selected based on the safety requirements. In general engineering, a safety factor of 6 is typical (→ *Load carrying ability*, **page 44**).

For SBD housings made of cast steel, the values obtained from **table 3** on **page 496** should be multiplied by a factor of 1,25. For housings made of grey cast iron, the values should be multiplied by a factor of 0,63.

The load P_a is the axial breaking load of the housing. If the incorporated bearing is mounted on a sleeve, the permissible axial load for the sleeve must be checked.

Additional housing support for SBD plummer block housings

When the housing is subjected to loads acting parallel to the support surface, it may be necessary to provide a stop to counter the load.

When loads act at angles between 55° and 120°, or when the axial loads are greater than 5% of P_{180° (→ **table 3** on **page 496**), a stop should be provided to counter the load. The

stop should be sufficiently strong to accommodate the loads acting parallel to the support surface.

Operating temperature

The permissible operating temperature is mainly limited by the adapter ring (→ **table 2, page 491**) and the lubricant. For temperature limits of SKF bearings and lubricants, refer to the product information available online at skf.com/bearings.

The housing material does not have any additional temperature limits, except for very low temperature applications where impact strength could be a factor.

The housing paint is heat resistant up to 80 °C (175 °F) material temperature or 100 °C (210 °F) ambient temperature.

When temperatures outside the permissible range are expected, contact the SKF application engineering service.

Operating speed

The permissible operating speed of the incorporated bearing is not limited by the housing.

Shaft specifications

When a labyrinth ring is mounted on the same shaft diameter as the bearing, its seat should comply with the tolerances required by the bearing.

- Housings without suffix
The recommended shaft tolerance class is h9 \oplus .
- Housings with suffix C
The recommended shaft tolerance class is h6 \oplus (both under the adapter sleeve and the labyrinth rings).
- Housings with suffix E
The recommended shaft tolerance class for bearings with a bore diameter up to 140 mm is p6 \oplus , and for larger bearings r6 \oplus . The shaft tolerance class under the outer labyrinth seal is h6 \oplus .

- Housings with suffix G
The recommended shaft tolerance class for bearings with a bore diameter up to 140 mm is p6 \oplus , and for larger bearings r6 \oplus . Where a labyrinth ring is mounted on a separate seat, the recommended shaft tolerance class is h6 \oplus .

The recommended shaft tolerances under the labyrinth rings are also provided in the illustrations in the product tables.

Attachment bolt recommendations

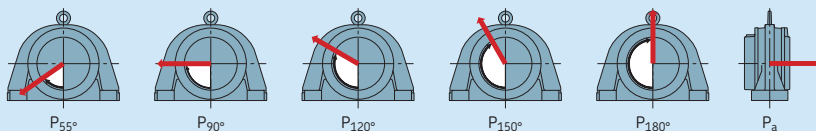
In typical applications 8.8 class hexagonal bolts in accordance with ISO 4014 can be used together with washers. If the load does not act perpendicularly toward the base, it may be necessary to use stronger 10.9 class bolts.

SKF housings can withstand loads resulting from tightening the attachment bolts to the torque values recommended by bolt manufacturers (→ **table 5 on page 500**). They are valid for oiled, but otherwise untreated, thread surfaces. SKF cannot guarantee that tightening to the recommended value will provide sufficient anchoring. Make sure that attachment bolts, dowels or stops, and a sufficiently strong support can accommodate all occurring loads.

Non-split plummer block housings and take-up housings SBD and THD series

Table 3

Breaking loads for SBDD housings (spheroidal graphite cast iron housings)

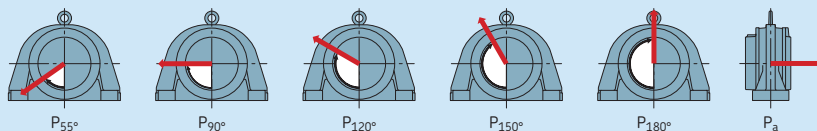


Housing Size		Breaking loads							
		P _{55°}	P _{90°}	P _{120°}	P _{150°}	P _{180°}	P _a		
kN									
2213			1)	1)	1)	1)	1)		
2218			1)	1)	1)	1)	1)		
2220	3024		700	600	550	450	550	100	
2222	3026	3122	1 050	850	900	750	900	200	
		3124	3222	850	700	600	500	600	100
			1 000	800	900	750	900	200	
2224	3028		1 000	800	650	550	650	150	
2226	3030	3126	3224	1 100	900	950	750	950	200
				1 100	900	1 150	950	1 150	200
2228	3032	3128	3226	1 250	1 000	950	750	950	200
				1 250	1 000	1 200	1 000	1 200	250
		3130	3228	1 500	1 200	950	800	950	200
2230	3034			1 500	1 200	1 200	1 000	1 200	250
		3036		1 700	1 350	1 200	1 000	1 200	250
		3132	3230	1 700	1 350	1 000	800	1 000	200
2232	3038			1 850	1 450	1 350	1 050	1 350	250
2234	3040	3134	3232	1 950	1 550	1 050	850	1 050	200
				2 150	1 700	1 650	1 350	1 650	350
2236	3044	3136	3234	2 350	1 850	1 100	900	1 100	200
				2 400	1 950	1 900	1 500	1 900	400
2238				2 400	1 950	1 900	1 500	1 900	400
2240	3048	3138	3236	2 500	2 050	1 150	950	1 150	250
				2 750	2 200	2 650	2 100	2 650	550
		3140	3238	3 100	2 450	1 250	1 000	1 250	250
2244	3052			3 100	2 450	2 700	2 150	2 700	550
		3144	3240	3 350	2 700	1 400	1 100	1 400	300
		3056		3 600	2 850	3 350	2 650	3 350	650
2248	3060	3148	3244	3 700	3 000	1 650	1 350	1 650	350
				4 000	3 150	3 450	2 800	3 450	700
		3152	3248	4 200	3 350	1 950	1 550	1 950	400
2252	3064			4 400	3 500	3 700	2 950	3 700	700
2256	3068			4 800	3 850	3 700	2 950	3 700	700
		3156	3252	5 100	4 100	2 300	1 850	2 300	450

1) Contact SKF for missing values

Table 3 cont.

Breaking loads for SBDD housings (spheroidal graphite cast iron housings)



Housing Size		Breaking loads							
		P _{55°}	P _{90°}	P _{120°}	P _{150°}	P _{180°}	P _a		
-		kN							
2260	3072			5 250	4 200	4 450	3 550	4 450	900
	3076	3160	3256	5 600	4 500	3 450	1 950	2 450	500
				5 900	4 700	4 550	3 650	4 550	900
2264	3080 3084	3164	3260	6 500	5 200	2 800	2 200	2 800	550
				6 550	5 300	4 950	3 950	4 950	1 000
				7 300	5 850	5 050	4 000	5 050	1 000
		3168	3264	7 800	6 200	3 150	2 500	3 150	650
		3172		7 900	6 350	3 600	2 900	3 600	700
		3176	3268	8 900	7 100	3 600	2 900	3 600	700
		3180	3272	9 700	7 800	4 000	3 150	4 000	800
			3276	10 300	8 200	4 450	3 550	4 450	900
		3184		10 550	8 500	4 450	3 550	4 450	1 000
			3280	12 200	9 800	5 050	4 050	5 050	1 000
		3284	13 350	10 600	5 850	4 650	5 850	1 150	

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Lubrication

SBD plummer (pillow) block housings and THD take-up housings are intended for grease lubrication. The lubricant should be selected based on the operating conditions of the bearing. For additional information about lubricant selection, refer to the product information available online at skf.com/bearings.

Initial grease fill

If no other requirements exist, the free space in the bearing should be completely filled with grease and the free space in the housing should be filled to 70 to 80% of its volume.

At speeds above 1/3 of the bearing limiting speed, the values in **table 4** should be reduced by 20 to 30% to avoid high operating temperatures. For bearing limiting speeds, refer to the product information available online at skf.com/bearings.

For highly contaminated environments, use the SKF three-barrier solution (→ **page 39**). In this case, check that the housing can accommodate sealed, self-aligning SKF bearings. For additional information, contact the SKF application engineering service.

Grease quantities for an 80% fill are listed in **table 4, page 499**. The values are valid for a typical lithium grease (about 0,95 g/cm³) and include the grease for the bearing.

In most applications, the initial grease fill will adequately lubricate the bearing until the grease is exchanged during the next planned inspection.

Relubrication

Some high speed, high temperature or heavy load applications may require the bearing to be relubricated. SBD plummer block housings and THD take-up housings have a button head grease fitting to lubricate the bearing in accordance with DIN 3404 (→ **figs. 9 and 10**). SBD housings have the grease fitting centred at the top of the housing body, while THD housings have the grease fitting centered on the side of the housing body.

The grease fitting can only be used to relubricate spherical roller bearings with a relubrication feature (a lubrication groove and holes in the outer ring). When applying grease via the relubrication feature, the shaft should be rotating.

CARB toroidal roller bearings should be relubricated from the side and not via the

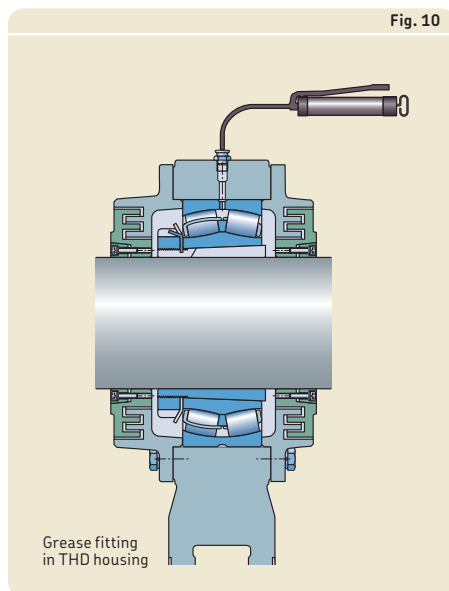
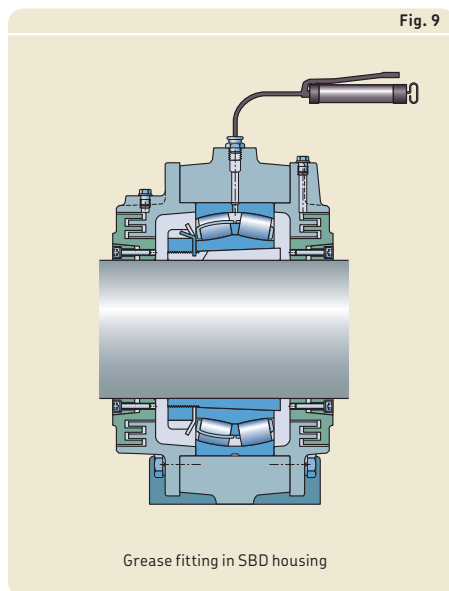


Table 4

Initial grease fill											
Housing	Initial fill ¹⁾		Housing	Initial fill ¹⁾		Housing	Initial fill ¹⁾				
	Housing type			Housing type			Housing type				
	A	B		A	B		A	B			
–	kg		–	kg		–	kg				
SBD 2213	0,10	0,10	SBD 3122	0,40	0,30	THD 2211	0,070	0,070	THD 3222	0,55	0,50
SBD 2218	0,25	0,25	SBD 3124	0,50	0,40	THD 2212	0,080	0,080	THD 3224	0,75	0,70
SBD 2220	0,90	0,40	SBD 3126	0,50	0,50	THD 2213	0,10	0,10	THD 3226	0,85	0,80
SBD 2222	1,00	0,50	SBD 3128	0,70	0,60	THD 2216	0,20	0,20	THD 3228	1,05	1,00
SBD 2224	1,00	0,50	SBD 3130	0,90	0,90	THD 2218	0,25	0,25	THD 3230	1,30	1,25
SBD 2226	1,10	0,60	SBD 3132	1,20	1,10	THD 2220	0,40	0,35	THD 3232	1,55	1,50
SBD 2228	1,20	0,80	SBD 3134	1,40	1,30	THD 2222	0,55	0,50	THD 3236	2,10	2,00
SBD 2230	1,20	0,90	SBD 3136	1,60	1,50	THD 2224	0,60	0,55	THD 3240	2,60	2,50
SBD 2232	1,30	1,00	SBD 3138	2,00	1,80	THD 2228	0,85	0,75	THD 3244	3,40	3,25
SBD 2234	1,40	1,20	SBD 3140	2,40	2,10				THD 3248	4,25	4,00
SBD 2236	1,80	1,50	SBD 3144	2,90	2,50				THD 3252	5,05	4,75
SBD 2238	1,80	1,60	SBD 3148	3,40	3,00	THD 3030	0,60	0,55	THD 3256	5,50	5,00
SBD 2240	2,00	1,80	SBD 3152	4,40	3,80	THD 3034	0,90	0,75	THD 3260	7,00	6,25
SBD 2244	2,60	2,40	SBD 3156	4,80	4,20	THD 3038	1,15	1,00	THD 3264	8,15	7,25
SBD 2248	3,60	3,40	SBD 3160	6,00	5,20	THD 3040	1,45	1,20	THD 3268	9,85	8,75
SBD 2252	4,10	3,80	SBD 3164	7,50	6,40	THD 3044	1,75	1,50	THD 3272	12,0	10,5
SBD 2256	5,20	4,90	SBD 3168	10,0	8,20	THD 3052	4,10	3,55	THD 3276	14,5	12,5
SBD 2260	5,80	5,50	SBD 3172	11,8	9,30				THD 3280	18,0	16,0
SBD 2264	7,90	7,50	SBD 3176	14,0	11,0	THD 3132	1,20	1,10	THD 3284	23,0	20,5
			SBD 3180	15,5	12,5	THD 3134	1,35	1,25			
			SBD 3184	18,0	15,0	THD 3136	2,40	1,60			
SBD 3024	0,40	0,30				THD 3138	2,85	2,60			
SBD 3026	0,50	0,40				THD 3140	2,30	2,00			
SBD 3028	0,50	0,50	SBD 3222	0,60	0,50	THD 3144	2,90	2,50			
SBD 3030	0,60	0,60	SBD 3224	0,80	0,70						
SBD 3032	0,70	0,60	SBD 3226	0,90	0,80	THD 3148	3,40	3,00			
SBD 3034	0,80	0,70	SBD 3228	1,10	1,00	THD 3152	4,40	3,75			
SBD 3036	1,00	0,90	SBD 3230	1,30	1,30	THD 3160	6,00	5,15			
SBD 3038	1,10	1,00	SBD 3232	1,60	1,50	THD 3164	7,50	6,40			
SBD 3040	1,30	1,10	SBD 3234	1,80	1,80	THD 3168	10,0	8,20			
SBD 3044	1,70	1,50	SBD 3236	2,10	2,00	THD 3176	14,0	11,0			
SBD 3048	2,00	1,70	SBD 3238	2,40	2,30						
SBD 3052	2,50	2,30	SBD 3240	2,60	2,50						
SBD 3056	2,80	2,60	SBD 3244	3,40	3,30						
SBD 3060	3,70	3,30	SBD 3248	4,30	4,00						
SBD 3064	4,20	3,80	SBD 3252	5,10	4,80						
SBD 3068	5,20	4,70	SBD 3260	7,00	6,30						
SBD 3072	6,10	5,40	SBD 3264	8,20	7,30						
SBD 3076	6,90	6,00	SBD 3268	9,90	8,80						
SBD 3080	8,20	7,30	SBD 3272	12,0	10,5						
SBD 3084	8,90	7,90	SBD 3276	14,5	12,5						
			SBD 3280	18,0	16,0						
			SBD 3284	23,0	20,5						

¹⁾ Based on 80% fill

Non-split plummer block housings and take-up housings SBD and THD series

Table 5

Cover bolts and attachment bolts

Housing Size	Cover bolts			Cover bolts Size	Tightening torque	Attachment bolts ¹⁾	
	22(00)	30(00)	31(00)			32(00)	Size
–	–	–	–	–	Nm	–	Nm
2211				M 8	25	–	–
2212				M 8	25	–	–
2213				M 8	25	M 16	200
2216				M 8	25	–	–
2218	3024			M 8	25	M 20	385
2220				M 8	25	M 20	385
2222	3026	3122		M 12	80	M 20	385
		3124		M 12	80	M 20	385
		3126		M 12	80	M 20	385
		3128		M 12	80	M 20	385
2224	3028			M 8	25	M 24	665
2226	3030			M 10	50	M 24	665
	3032			M 10	50	M 24	665
		3130	3222	M 12	80	M 24	665
		3132	3224	M 12	80	M 24	665
			3226	M 12	80	M 24	665
			3228	M 12	80	M 24	665
2228	3034			M 10	50	M 30	1 310
2230	3036	3134		M 12	80	M 30	1 310
2232	3038			M 12	80	M 30	1 310
2234	3040			M 12	80	M 30	1 310
		3136	3230	M 16	200	M 30	1 310
			3232	M 16	200	M 30	1 310
			3234	M 16	200	M 30	1 310
			3236	M 16	200	M 30	1 310
			3238	M 16	200	M 30	1 310
2236	3044	3138	3240	M 16	200	M 36	2 280
2238	3048	3140		M 16	200	M 36	2 280
2240	3052	3144		M 16	200	M 36	2 280
2244	3056			M 16	200	M 36	2 280
2248	3060	3148	3244	M 20	385	M 36	2 280
2252	3064	3152	3248	M 20	385	M 36	2 280
2256	3068		3252	M 20	385	M 36	2 280
2260	3072			M 20	385	M 36	2 280
		3156	3256	M 24	665	M 36	2 280
		3160		M 24	665	M 36	2 280
		3164		M 24	665	M 36	2 280
	3076			M 20	385	M 48	5 450
2264	3080	3168	3260	M 24	665	M 48	5 450
	3084	3172	3264	M 24	665	M 48	5 450
		3176	3268	M 30	1 310	M 56	8 710
		3180	3272	M 30	1 310	M 64	13 100
		3184	3276	M 30	1 310	M 64	13 100
			3280	M 30	1 310	M 64	13 100
			3284	M 30	1 310	M 64	13 100

1) Valid for SBD housings only

2) Recommended by bolt manufacturers

grease fitting. Therefore, CARB toroidal roller bearings need customized SBD and THD housings. For more information, contact the SKF application engineering service.

Mounting

SBD and THD housings must be mounted properly using the appropriate tools and state of the art mechanical mounting methods. All associated components must meet certain basic requirements (→ *Specifications for shafts and housing support surfaces on page 45*).

For information about mounting rolling bearings, refer to the *SKF bearing maintenance handbook* or skf.com/mount.

Cover bolt torque specifications

Cover bolts should be tightened to the torque values listed in **table 5**. The cover bolts are in accordance with ISO-4017.

Mounting and dismantling the adapter ring

The adapter ring, which locks the labyrinth ring in place, has plain holes for mounting and threaded holes for dismantling. The adapter ring bolts should be tightened to the torque values listed in **table 1 on page 491**.

Condition monitoring

If connections for condition monitoring sensors are required, contact the SKF application engineering service.

Accessories

There are several accessories available for SBD and THD housings, including automatic lubricators, centralized lubrication systems and adapters for grease fittings. In some cases, an adapter is needed to attach the accessory to the housing. For additional information, refer to *SKF tools and products* (→ **page 47**).

Ordering information

SBD plummer (pillow) block housings and THD take-up housings are supplied with the appropriate covers, labyrinth rings and, if needed, adapter rings. End plates to secure a bearing on a cylindrical seat at the end of a shaft are not supplied with the housings. Bearings and adapter sleeves must be ordered separately.

Order example

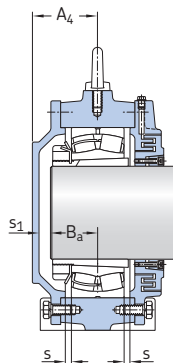
Two SBD plummer block housings are required for two 22213 E spherical roller bearings. One housing accommodates the non-locating bearing at the end of the shaft. The other housing accommodates the locating bearing and a through shaft.

The following items should be ordered:

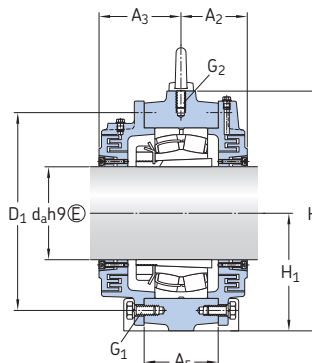
- 1 housing SBDD 2213 AL
- 1 housing SBDD 2213 BF

10.1 SBD plummer block housings for bearings on an adapter sleeve on plain shafts

d_a 60 – 140 mm



Type AL
Non-locating bearing
Housing for shaft end

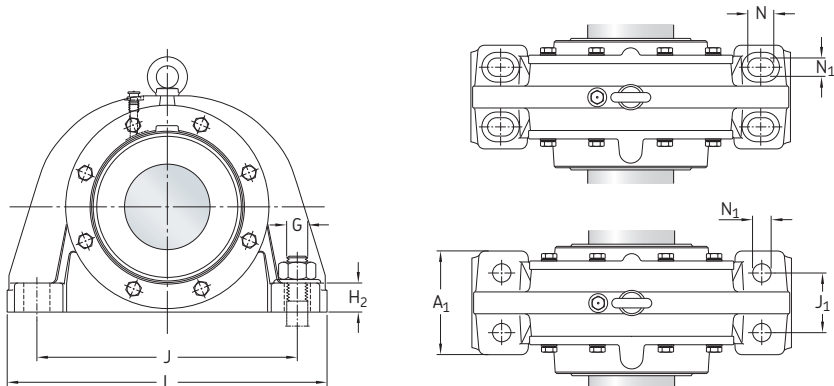


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Adapter ring (included)	Dimensions Housing						
					A_1	A_2	A_3	A_4	A_5	D_1	H
mm	–	–			mm						
60	SBDD 2213	22213 EK	H 313	PSBD 60	95	50	65	45	58	135	165
80	SBDD 2218	22218 EK	H 318	PSBD 80	110	60	70	51	55	185	220
90	SBDD 2220	22220 EK	H 320	PSBD 90	110	70	85	63	56	195	230
100	SBDD 3122	23122 CCK/W33	H 3122	PSBD 100	150	81	102	83	80	215	270
	SBDD 2222	22222 EK	H 322	PSBD 100	120	78	90	68	64	215	260
	SBDD 3222	23222 CCK/W33	H 2322	PSBD 100	130	91	103	76	90	230	285
110	SBDD 3024	23024 CCK/W33	H 3024	PSBD 110	110	63	83	63	56	195	230
	SBDD 3124	23124 CCK/W33	H 3124	PSBD 110	140	76	93	78	85	230	285
	SBDD 2224	22224 EK	H 3124	PSBD 110	130	80,5	95,5	68	70	230	275
	SBDD 3224	23224 CCK/W33	H 2334	PSBD 110	140	93	108	78	95	245	305
115	SBDD 3026	23026 CCK/W33	H 3026	PSBD 115	120	68	88	68	64	215	260
	SBDD 3126	23126 CCK/W33	H 3126	PSBD 115	140	80	100	80	90	240	295
	SBDD 2226	22226 EK	H 3126	PSBD 115	140	88	98	70	76	245	290
	SBDD 3226	23226 CCK/W33	H 2336	PSBD 115	150	103	108	78	100	260	325
125	SBDD 3028	23028 CCK/W33	H 3028	PSBD 125	130	68	88	68	70	230	275
	SBDD 3128	23128 CCK/W33	H 3128	PSBD 125	150	85	110	85	95	260	315
	SBDD 2228	22228 CCK/W33	H 3128	PSBD 125	160	94	104	83	82	275	330
	SBDD 3228	23228 CCK/W33	H 2338	PSBD 125	160	108	118	88	110	285	350
135	SBDD 3030	23030 CCK/W33	H 3030	PSBD 135	140	73	94	70	76	245	290
	SBDD 3130	23130 CCK/W33	H 3130	PSBD 135	200	93	113	93	102	285	345
	SBDD 2230	22230 CCK/W33	H 3130	PSBD 135	170	98	108	88	90	300	360
	SBDD 3230	23230 CCK/W33	H 2330	PSBD 135	170	113	123	93	120	305	375
140	SBDD 3032	23032 CCK/W33	H 3032	PSBD 140	150	78	98	76	76	260	310
	SBDD 3132	23132 CCK/W33	H 3132	PSBD 140	200	98	123	98	110	310	368
	SBDD 2232	22232 CCK/W33	H 3132	PSBD 140	180	101	116	88	96	315	370
	SBDD 3232	23232 CCK/W33	H 2332	PSBD 140	180	118	133	98	130	330	395

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

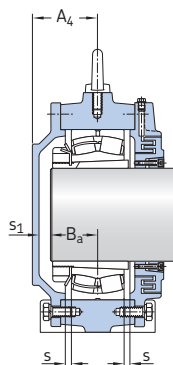
²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.



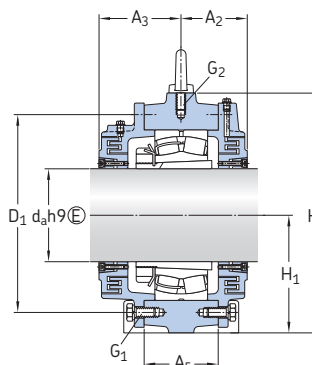
Shaft diam.	Dimensions Housing										Eye bolt acc. to DIN 580 G ₂	Dimensions Other		Mass Housing type A B	
	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁		B _a	s ₁	A	B
mm	mm										-	mm		kg	
60	80	25	220	50	280	-	19	2	16	M8	-	32	6	8,9	9,3
80	110	38	290	60	370	-	24	2	20	M8	M10	40	5	21	23
90	115	35	300	60	370	-	24	2	20	M8	M12	45	11	23	25
100	130	40	300	80	400	35	25	2	20	M12	M12	52	25	40	45
	130	38	340	60	410	-	24	2	20	M8	M12	50	11	37	40
	140	42	350	70	440	-	28	2	24	M12	M16	60	9	46	50
110	115	35	300	60	370	-	24	2	20	M8	M12	48	8	19	20
	140	40	330	80	410	35	25	2	20	M12	M12	56	13	45	50
	140	40	360	70	430	-	28	3	24	M8	M12	55	6	43	46
	150	42	370	75	470	35	30	2	24	M12	M16	64	7	50	55
115	130	38	340	60	410	-	24	2	20	M8	M12	52	9	28	30
	145	40	350	80	430	35	25	2	20	M12	M12	58	15	50	55
	145	42	370	80	455	-	28	3	24	M10	M12	57	5	52	56
	160	45	400	85	500	40	30	2	24	M12	M16	66	5	60	65
125	140	40	360	70	430	-	28	3	24	M8	M12	54	7	32	35
	155	45	380	85	470	35	25	2	20	M12	M12	62	16	58	65
	165	50	420	95	510	-	35	3	30	M10	M12	62	13	65	70
	170	50	430	85	530	40	30	3	24	M16	M20	72	9	74	80
135	145	42	370	80	455	-	28	3	24	M10	M12	56	6	37	40
	170	60	450	110	580	45	35	3	24	M12	M16	70	15	78	85
	180	52	450	100	540	-	35	3	30	M12	M16	66	14	77	82
	180	54	450	90	550	45	35	3	30	M16	M20	78	7	87	95
140	155	45	390	90	480	-	28	3	24	M10	M12	62	6	41	45
	180	55	430	110	540	40	30	3	24	M12	M16	75	15	90	100
	185	55	480	105	570	-	35	3	30	M12	M16	72	8	90	96
	190	58	490	105	600	-	35	3	30	M16	M20	84	6	100	110

10.1 SBD plummer block housings for bearings on an adapter sleeve on plain shafts

d_a 150 – 240 mm



Type AL
Non-locating bearing
Housing for shaft end

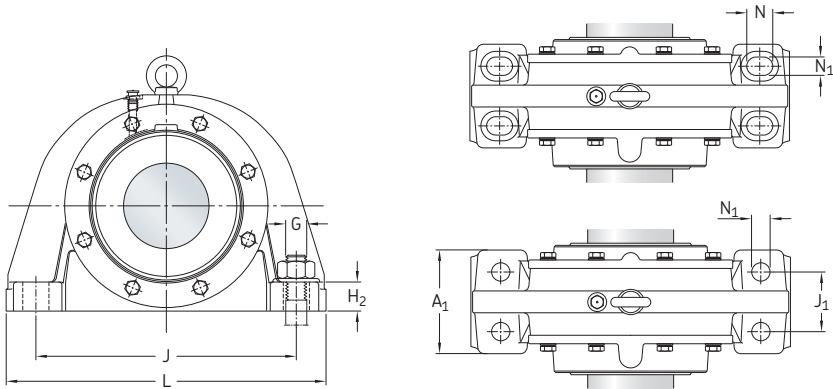


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Adapter ring (included)	Dimensions Housing						
					A_1	A_2	A_3	A_4	A_5	D_1	H
mm	–	–			mm						
150	SBDD 3034	23034 CCK/W33	H 3034	PSBD 150	160	78	103	83	82	280	330
	SBDD 3134	23134 CCK/W33	H 3134	PSBD 150	200	113	136	112	120	330	395
	SBDD 2234	22234 CCK/W33	H 3134	PSBD 150	190	112,5	127,5	97	104	335	400
	SBDD 3234	23234 CCK/W33	H 2334	PSBD 150	200	128	143	103	135	345	410
160	SBDD 3036	23036 CCK/W33	H 3036	PSBD 160	170	83	108	88	90	305	360
	SBDD 3136	23136 CCK/W33	H 3136	PSBD 160	200	118	138	116	125	350	410
	SBDD 2236	22236 CCK/W33	H 3136	PSBD 160	200	118	133	102	110	360	430
	SBDD 3236	23236 CCK/W33	H 2336	PSBD 160	210	133	148	108	140	360	430
170	SBDD 3038	23038 CCK/W33	H 3038	PSBD 170	180	93	118	88	96	315	370
	SBDD 3138	23138 CCK/W33	H 3138	PSBD 170	210	123	143	120	130	370	435
	SBDD 2238	22238 CCK/W33	H 3138	PSBD 170	200	118	133	102	110	370	430
	SBDD 3238	23238 CCK/W33	H 2338	PSBD 170	220	138	153	113	150	385	455
180	SBDD 3040	23040 CCK/W33	H 3040	PSBD 180	190	97	122	97	104	340	400
	SBDD 3140	23140 CCK/W33	H 3140	PSBD 180	220	127	147	127	135	380	455
	SBDD 2240	22240 CCK/W33	H 3140	PSBD 180	210	122	134,5	107	118	390	450
	SBDD 3240	23240 CCK/W33	H 2340	PSBD 180	240	138	158	118	165	405	475
200	SBDD 3044	23044 CCK/W33	OH 3044 H	PSBD 200	200	102	137	102	110	370	430
	SBDD 3144	23144 CCK/W33	OH 3144 H	PSBD 200	230	135	160	135	150	420	485
	SBDD 2244	22244 CCK/W33	OH 3144 H	PSBD 200	220	124,5	159,5	117	128	435	500
	SBDD 3244	23244 CCK/W33	OH 2344 H	PSBD 200	250	148	183	133	175	445	525
220	SBDD 3048	23048 CCK/W33	OH 3048 H	PSBD 220	210	102	142	107	118	390	450
	SBDD 3148	23148 CCK/W33	OH 3148 H	PSBD 220	250	152	182	142	160	455	550
	SBDD 2248	22248 CCK/W33	OH 3148 H	PSBD 220	250	130	165	132	144	490	570
	SBDD 3248	23248 CCK/W33	OH 2348 H	PSBD 220	250	148	188	148	190	490	590
240	SBDD 3052	23052 CCK/W33	OH 3052 H	PSBD 240	220	107	147	117	128	435	500
	SBDD 3152	23152 CCK/W33	OH 3152 H	PSBD 240	250	152	187	152	175	490	590
	SBDD 2252	22252 CCK/W33	OH 3152 H	PSBD 240	260	145	182,5	137	154	520	590
	SBDD 3252	23252 CCK/W33	OH 2352 H	PSBD 240	290	167	208	158	205	535	625

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.

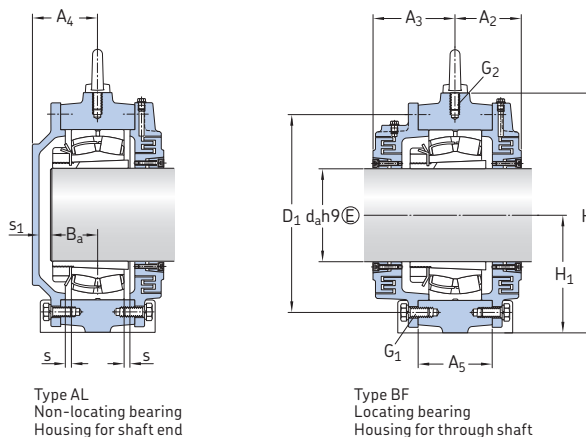


Shaft diam.	Dimensions Housing											Eye bolt acc. to DIN 580 G ₂	Dimensions Other		Mass Housing type A B	
	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁	B _a		s ₁	A	B	
mm	mm											-	mm		kg	
150	165	50	420	95	510	-	35	3	30	M10	M12	66	9	50	55	
	190	60	470	110	570	45	35	3	30	M12	M20	78	26	100	110	
	200	60	510	110	600	-	35	4	30	M12	M16	75	14	103	110	
	200	62	525	110	640	45	35	3	30	M16	M20	88	7	130	140	
160	180	52	450	100	540	-	35	3	30	M12	M16	70	10	64	70	
	200	60	490	105	600	45	35	3	30	M16	M20	82	26	118	130	
	215	65	540	115	640	-	42	4	36	M16	M20	78	14	112	120	
	210	65	550	120	680	45	35	3	30	M16	M20	90	10	147	160	
170	185	55	480	105	570	-	35	3	30	M12	M16	72	8	74	80	
	210	65	550	120	680	45	30	3	36	M16	M20	88	22	146	160	
	215	65	540	115	640	-	42	4	36	M16	M20	82	10	126	135	
	220	75	560	120	710	45	35	4	30	M16	M20	95	10	170	185	
180	200	60	510	110	600	-	35	4	30	M12	M16	78	11	83	90	
	220	85	560	120	710	52	42	3	36	M16	M24	95	22	175	190	
	225	70	560	120	680	-	42	4	36	M16	M20	85	12	145	155	
	235	75	640	140	780	52	42	4	36	M16	M24	100	10	200	220	
200	215	65	540	115	640	-	42	4	36	M16	M20	80	12	107	115	
	235	75	640	140	780	52	42	4	36	M16	M24	100	25	205	220	
	250	75	600	130	720	-	42	4	36	M16	M20	95	10	187	200	
	260	80	700	140	850	52	42	4	36	M20	M24	112	11	270	290	
220	225	70	560	120	680	-	42	4	36	M16	M20	85	12	120	130	
	270	80	720	140	890	52	42	4	36	M20	M24	106	26	250	270	
	285	85	690	150	820	-	42	5	36	M20	M24	105	15	235	250	
	290	90	750	140	900	52	42	5	36	M20	M24	122	16	345	370	
240	250	75	600	130	720	-	42	4	36	M16	M20	92	13	153	165	
	290	90	750	140	900	52	42	4	36	M20	M24	118	24	300	320	
	295	90	730	160	860	-	42	5	36	M20	M24	110	13	290	310	
	310	95	800	160	960	65	42	5	36	M20	M24	132	16	435	470	

10.1

10.1 SBD plummer block housings for bearings on an adapter sleeve on plain shafts

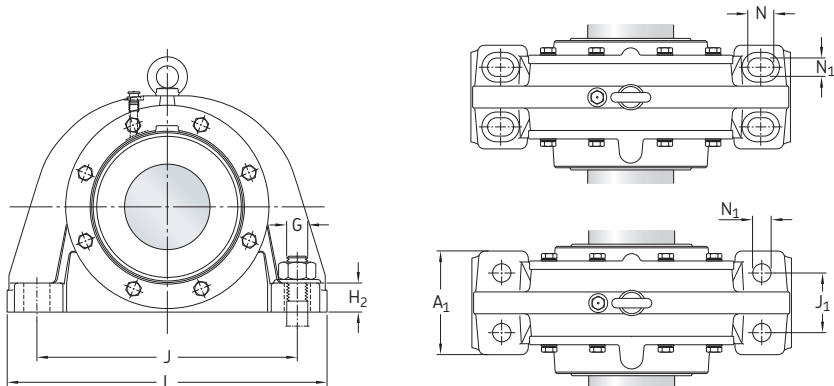
d_a 260 – 400 mm



Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Adapter ring (included)	Dimensions Housing						
					A_1	A_2	A_3	A_4	A_5	D_1	H
mm	–	–			mm						
260	SBDD 3056	23056 CCK/W33	OH 3056 H	PSBD 260	240	117	157	122	128	455	520
	SBDD 3156	23156 CCK/W33	OH 3156 H	PSBD 260	250	157	197	165	175	510	590
	SBDD 2256	22256 CCK/W33	OH 3156 H	PSBD 260	270	152	192	147	158	555	630
	SBDD 3256	23256 CCK/W33	OH 2356 H	PSBD 260	300	178	218	163	210	555	645
280	SBDD 3060	23060 CCK/W33	OH 3060 H	PSBD 280	250	122	167	132	144	500	570
	SBDD 3160	23160 CCK/W33	OH 3160 H	PSBD 280	300	162	207	167	190	550	655
	SBDD 2260	22260 CCK/W33	OH 3160 H	PSBD 280	280	160	191	152	168	585	660
	SBDD 3260	23260 CCK/W33	OH 3260 H	PSBD 280	330	182	222	187	230	600	705
300	SBDD 3064	23064 CCK/W33	OH 3064 H	PSBD 300	260	122	172	137	154	520	590
	SBDD 3164	23164 CCK/W33	OH 3164 H	PSBD 300	300	177	212	187	210	590	702
	SBDD 2264	22264 CCK/W33	OH 3164 H	PSBD 300	320	175	202	167	180	640	720
	SBDD 3264	23264 CCK/W33	OH 3264 H	PSBD 300	360	192	237	187	250	640	760
320	SBDD 3068	23068 CCK/W33	OH 3068 H	PSBD 320	270	132	177	147	158	565	630
	SBDD 3168	23168 CCK/W33	OH 3168 H	PSBD 320	360	197	242	237	220	630	735
	SBDD 3268	23268 CAK/W33	OH 3268 H	PSBD 320	380	202	272	237	265	680	810
340	SBDD 3072	23072 CCK/W33	OH 3072 H	PSBD 340	280	132	182	152	168	585	660
	SBDD 3172	23172 CCK/W33	OH 3172 H	PSBD 340	370	197	247	243	225	650	760
	SBDD 3272	23272 CAK/W33	OH 3272 H	PSBD 340	400	227	282	247	275	710	825
360	SBDD 3076	23076 CCK/W33	OH 3076 H	PSBD 360	300	137	187	157	168	605	680
	SBDD 3176	23176 CAK/W33	OH 3176 H	PSBD 360	380	202	257	254	230	680	790
	SBDD 3276	23276 CAK/W33	OH 3276 H	PSBD 360	405	232	297	257	295	745	880
380	SBDD 3080	23080 CCK/W33	OH 3080 H	PSBD 380	320	142	202	167	180	650	720
	SBDD 3180	23180 CAK/W33	OH 3180 H	PSBD 380	400	197	262	247	235	710	845
	SBDD 3280	23280 CAK/W33	OH 3280 H	PSBD 380	450	242	307	257	300	790	905
400	SBDD 3084	23084 CAK/W33	OH 3084 H	PSBD 400	340	147	202	167	180	670	750
	SBDD 3184	23184 CKJ/W33	OH 3184 H	PSBD 400	420	212	289	257	260	760	900
	SBDD 3284	23284 CAK/W33	OH 3284 H	PSBD 400	470	252	317	267	315	835	955

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

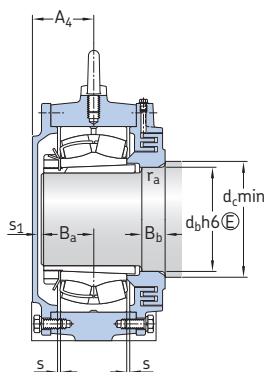
²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.



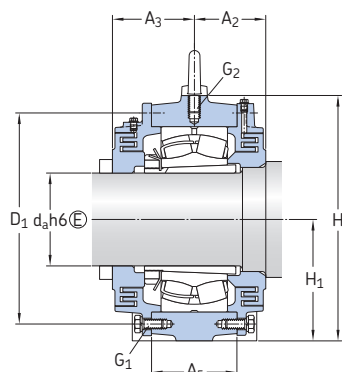
Shaft diam.	Dimensions Housing										Eye bolt acc. to DIN 580 G ₂	Dimensions Other		Mass Housing type	
	H ₁	H ₂	J	J ₁	L	N	N ₁	s	G	G ₁		B _a	s ₁	A	B
mm	mm										-	mm		kg	
260	260	80	630	140	760	-	42	5	36	M16	M20	96	14	177	190
	290	90	750	140	900	65	42	5	36	M24	M24	120	35	325	350
	315	95	770	170	900	-	42	5	36	M20	M24	115	18	330	350
	320	100	840	170	1000	65	42	5	36	M24	M30	135	16	490	530
280	285	85	690	150	820	-	42	5	36	M20	M24	105	15	215	230
	320	100	840	170	1000	65	42	5	36	M24	M30	125	32	400	430
	330	100	820	180	960	-	42	5	36	M20	M24	120	17	400	430
	350	105	920	180	1100	75	56	6	48	M24	M30	142	33	590	640
300	295	90	730	160	860	-	42	5	36	M20	M24	108	15	240	255
	350	100	940	160	1150	65	42	5	36	M24	M30	135	40	490	530
	360	110	900	200	1060	-	56	5	48	M24	M30	125	26	485	520
	370	115	960	200	1150	75	56	6	48	M24	M30	152	21	700	760
320	315	95	770	170	900	-	42	6	36	M20	M24	120	13	280	305
	370	115	960	200	1150	75	56	6	48	M24	M30	155	70	590	630
	390	125	980	200	1200	75	60	6	56	M24	M36	175	47	830	900
340	330	100	820	180	960	-	42	6	36	M20	M24	120	17	315	340
	380	115	1000	200	1200	75	56	6	48	M24	M30	160	67	660	700
	410	130	1040	210	1280	80	68	7	64	M24	M36	180	51	950	1020
360	340	105	840	190	1000	-	56	6	48	M20	M24	124	17	350	380
	390	125	1000	200	1200	75	60	6	56	M30	M30	165	73	730	770
	425	135	1100	225	1350	85	68	7	64	M30	M36	186	55	1060	1140
380	360	110	900	200	1060	-	56	6	48	M24	M30	134	17	420	450
	410	130	1040	210	1280	80	68	7	64	M30	M36	170	61	820	870
	450	145	1160	240	1430	85	68	7	64	M30	M36	196	45	1240	1330
400	375	115	940	210	1100	-	56	6	48	M24	M30	135	16	465	500
	450	135	1100	210	1350	85	68	7	64	M30	M36	190	51	1000	1070
	470	150	1220	255	1500	90	72	8	64	M30	M36	212	39	1500	1600

10.2 SBD plummer block housings for bearings on an adapter sleeve on stepped shafts

d_a 90 – 150 mm



Type AL
Non-locating bearing
Housing for shaft end

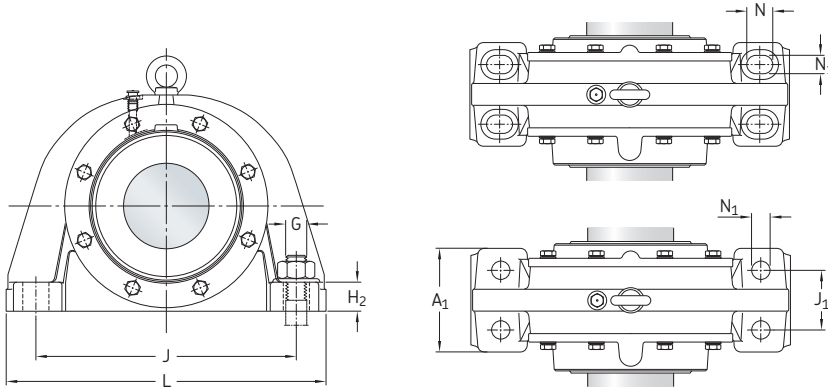


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Dimensions Housing											
				A ₁	A ₂	A ₃	A ₄	A ₅	D ₁	H	H ₁	H ₂	J		
mm	–	–		mm											
90	SBDD 2220 C	22220 EK	H 320	110	70	85	63	56	195	230	115	35	300		
100	SBDD 3122 C	23122 CCK/W33	H 3122	150	81	102	83	80	215	270	130	40	300		
	SBDD 2222 C	22222 EK	H 322	120	78	90	68	64	215	260	130	38	340		
	SBDD 3222 C	23222 CCK/W33	H 2322	130	91	103	76	90	230	285	140	42	350		
110	SBDD 3024 C	23024 CCK/W33	H 3024	110	63	83	63	56	195	230	115	35	300		
	SBDD 3124 C	23124 CCK/W33	H 3124	140	76	93	78	85	230	285	140	40	330		
	SBDD 2224 C	22224 EK	H 3124	130	80,5	95,5	68	70	230	275	140	40	360		
	SBDD 3224 C	23224 CCK/W33	H 2324	140	93	108	78	95	245	305	150	42	370		
115	SBDD 3026 C	23026 CCK/W33	H 3026	120	68	88	68	64	215	260	130	38	340		
	SBDD 3126 C	23126 CCK/W33	H 3126	140	80	100	80	90	240	295	145	40	350		
	SBDD 2226 C	22226 EK	H 3126	140	88	98	70	70	245	290	145	42	370		
	SBDD 3226 C	23226 CCK/W33	H 2326	150	103	108	78	100	260	325	160	45	400		
125	SBDD 3028 C	23028 CCK/W33	H 3028	130	68	88	68	70	230	275	140	40	360		
	SBDD 3128 C	23128 CCK/W33	H 3128	150	85	110	85	95	260	315	155	45	380		
	SBDD 2228 C	22228 CCK/W33	H 3128	160	94	104	83	82	275	330	165	50	420		
	SBDD 3228 C	23228 CCK/W33	H 2328	160	108	118	88	110	285	350	170	50	430		
135	SBDD 3030 C	23030 CCK/W33	H 3030	140	73	94	70	76	245	290	145	42	370		
	SBDD 3130 C	23130 CCK/W33	H 3130	200	93	113	93	102	285	345	170	60	450		
	SBDD 2230 C	22230 CCK/W33	H 3130	170	98	108	88	90	300	360	180	52	450		
	SBDD 3230 C	23230 CCK/W33	H 2330	170	113	123	93	120	305	375	180	54	450		
140	SBDD 3032 C	23032 CCK/W33	H 3032	150	78	98	76	76	260	310	155	45	390		
	SBDD 3132 C	23132 CCK/W33	H 3132	200	98	123	98	110	310	368	180	55	430		
	SBDD 2232 C	22232 CCK/W33	H 3132	180	101	116	88	96	315	370	185	55	480		
	SBDD 3232 C	23232 CCK/W33	H 2332	180	118	133	98	130	330	395	190	58	490		
150	SBDD 3034 C	23034 CCK/W33	H 3034	160	78	103	83	82	280	330	165	50	420		
	SBDD 3134 C	23134 CCK/W33	H 3134	200	113	136	112	120	330	395	190	60	470		
	SBDD 2234 C	22234 CCK/W33	H 3134	190	112,5	127,5	97	104	335	400	200	60	510		
	SBDD 3234 C	23234 CCK/W33	H 2334	200	128	143	103	135	345	410	200	62	525		

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.

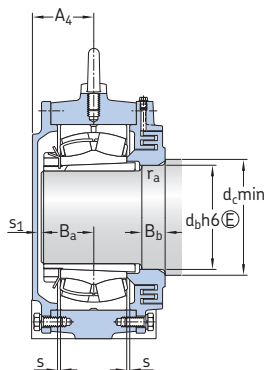


Shaft diam.	Dimensions Housing								Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet						Mass Housing type	
	J ₁	L	N	N ₁	s	G	G ₁	B _a		B _b	d _b	d _{c min}	r _a	s ₁	A	B	
mm	mm								-	mm						kg	
90	60	370	-	24	2	20	M8	M12	45	35	102	115	4	11	23	25	
100	80	400	35	25	2	20	M12	M12	52	30	112	125	4	25	40	45	
	60	410	-	24	2	20	M8	M12	50	35	112	125	4	11	37	40	
	70	440	35	30	2	24	M12	M16	60	32	112	125	4	9	46	50	
110	60	370	-	24	2	20	M8	M12	48	25	122	135	4	8	19	20	
	80	410	35	25	2	20	M12	M12	56	30	122	135	4	13	45	50	
	70	430	-	28	3	24	M8	M12	55	35	122	135	4	6	43	46	
	75	470	35	30	2	24	M12	M16	64	32	122	135	4	7	50	55	
115	60	410	-	24	2	20	M8	M12	52	25	132	150	6	9	28	30	
	80	430	35	25	2	20	M12	M12	58	30	132	150	6	15	50	55	
	80	455	-	28	3	24	M10	M12	57	40	132	150	6	5	52	56	
	85	500	40	30	2	24	M12	M16	66	35	132	150	6	5	60	65	
125	70	430	-	28	3	24	M8	M12	54	25	142	160	6	7	32	35	
	85	470	35	25	2	24	M12	M12	62	30	142	160	6	16	58	65	
	95	510	-	35	3	30	M10	M12	62	40	142	160	6	13	65	70	
	85	530	40	30	3	24	M16	M20	72	35	142	160	6	9	74	80	
135	80	455	-	28	3	24	M10	M12	56	25	152	170	6	6	37	40	
	110	580	45	35	3	24	M12	M16	70	30	152	170	6	15	78	85	
	100	540	-	35	3	30	M12	M16	66	40	152	170	6	14	77	82	
	90	550	45	35	3	30	M16	M20	78	40	152	170	6	7	87	95	
140	90	480	-	28	3	24	M10	M12	62	30	162	185	8	6	41	45	
	110	540	40	30	3	24	M16	M12	75	30	162	185	8	15	90	100	
	105	570	-	35	3	30	M16	M12	72	40	162	185	8	8	90	96	
	105	600	45	35	3	30	M16	M20	84	40	162	185	8	6	100	110	
150	95	510	-	35	4	30	M10	M12	66	30	172	195	8	9	50	55	
	110	570	45	35	3	30	M12	M20	78	40	172	195	8	26	100	110	
	110	600	-	35	4	30	M12	M16	75	45	172	195	8	14	103	110	
	110	640	45	35	3	30	M16	M20	88	40	172	195	8	7	130	140	

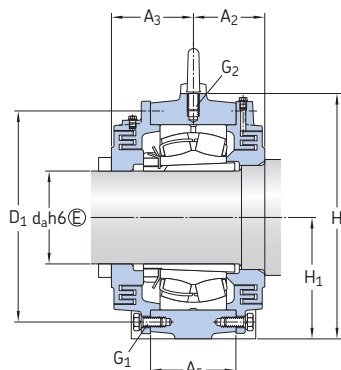
10.2

10.2 SBD plummer block housings for bearings on an adapter sleeve on stepped shafts

d_a 160 – 260 mm



Type AL
Non-locating bearing
Housing for shaft end

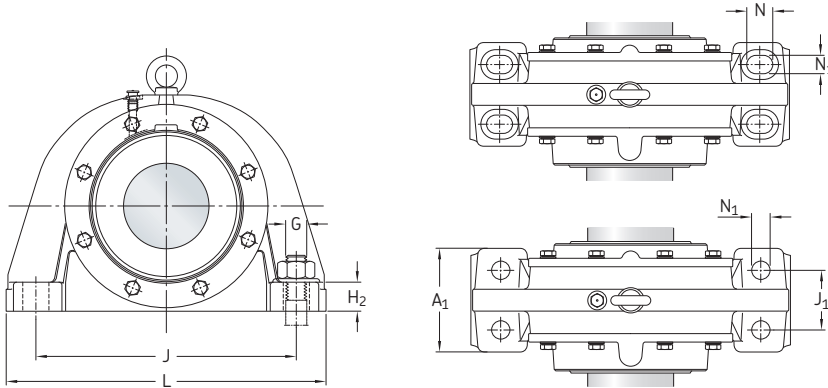


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Dimensions Housing										
				A ₁	A ₂	A ₃	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	
mm	–	–	–	mm										
160	SBDD 3036 C	23036 CCK/W33	H 3036	170	83	108	88	90	305	360	180	52	450	
	SBDD 3136 C	23136 CCK/W33	H 3136	200	118	138	116	125	350	410	200	60	490	
	SBDD 2236 C	22236 CCK/W33	H 3136	200	118	133	102	110	360	430	215	65	540	
	SBDD 3236 C	23236 CCK/W33	H 2336	210	133	148	108	140	360	430	210	65	550	
170	SBDD 3038 C	23038 CCK/W33	H 3038	180	93	118	88	96	315	370	185	55	480	
	SBDD 3138 C	23138 CCK/W33	H 3138	210	123	143	120	130	370	435	210	65	550	
	SBDD 2238 C	22238 CCK/W33	H 3138	200	118	133	102	110	370	430	215	65	540	
	SBDD 3238 C	23238 CCK/W33	H 2338	220	138	153	113	150	385	455	220	75	560	
180	SBDD 3040 C	23040 CCK/W33	H 3040	190	97	122	97	104	340	400	200	60	510	
	SBDD 3140 C	23140 CCK/W33	H 3140	220	127	147	127	135	380	455	220	85	560	
	SBDD 2240 C	22240 CCK/W33	H 3140	210	122	134,5	107	118	390	450	225	70	560	
	SBDD 3240 C	23240 CCK/W33	H 2340	240	138	158	118	165	405	475	235	75	640	
200	SBDD 3044 C	23044 CCK/W33	OH 3044 HB	200	102	137	102	110	370	430	215	65	540	
	SBDD 3144 C	23144 CCK/W33	OH 3144 HB	230	135	160	135	150	420	485	235	75	640	
	SBDD 2244 C	22244 CCK/W33	OH 3144 HB	220	124,5	159,5	117	128	435	500	250	75	600	
	SBDD 3244 C	23244 CCK/W33	OH 2344 HB	250	148	183	133	175	445	525	260	80	700	
220	SBDD 3048 C	23048 CCK/W33	OH 3048 HB	210	102	142	107	118	390	450	225	70	560	
	SBDD 3148 C	23148 CCK/W33	OH 3148 HB	250	152	182	142	160	455	550	270	80	720	
	SBDD 2248 C	22248 CCK/W33	OH 3148 HB	250	130	165	132	144	490	570	285	85	690	
	SBDD 3248 C	23248 CCK/W33	OH 2348 HB	250	148	188	148	190	490	590	290	90	750	
240	SBDD 3052 C	23052 CCK/W33	OH 3052 HB	220	107	147	117	128	435	500	250	75	600	
	SBDD 3152 C	23152 CCK/W33	OH 3152 HB	250	152	187	152	175	490	590	290	90	750	
	SBDD 2252 C	22252 CCK/W33	OH 3152 HB	260	145	182,5	137	154	520	590	295	90	730	
	SBDD 3252 C	23252 CCK/W33	OH 2352 HB	290	167	208	158	205	535	625	310	95	800	
260	SBDD 3056 C	23056 CCK/W33	OH 3056 HB	240	117	157	122	128	455	520	260	80	630	
	SBDD 3156 C	23156 CCK/W33	OH 3156 HB	250	157	197	165	175	510	590	290	90	750	
	SBDD 2256 C	22256 CCK/W33	OH 3156 HB	270	152	192	147	158	555	630	315	95	770	
	SBDD 3256 C	23256 CCK/W33	OH 2356 HB	300	178	218	163	210	555	645	320	100	840	

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.

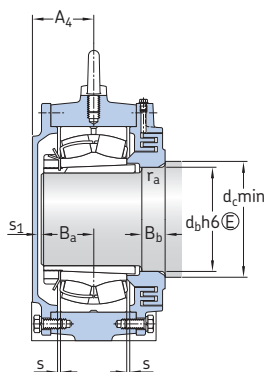


Shaft diam.	Dimensions Housing							Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet						Mass Housing type	
	J ₁	L	N	N ₁	s	G	G ₁		B _a	B _b	d _b	d _{c min}	r _a	s ₁	A	B
mm	mm							-	mm						kg	
160	100	540	-	35	3	30	M12	M16	70	30	182	205	8	10	64	70
	105	600	45	35	3	30	M16	M20	82	40	182	205	8	26	118	130
	115	640	-	42	4	36	M16	M20	78	45	182	205	8	14	112	120
	120	680	45	35	3	30	M16	M20	90	45	182	205	8	10	147	160
170	105	570	-	35	3	30	M12	M16	72	30	192	215	8	8	74	80
	120	680	45	35	3	36	M16	M20	88	40	192	215	8	22	146	160
	115	640	-	42	4	36	M16	M20	82	45	192	215	8	10	126	135
	120	710	45	35	4	30	M16	M20	95	45	192	215	8	10	170	185
180	110	600	-	35	4	30	M12	M16	78	35	202	225	8	11	83	90
	120	710	52	42	3	36	M16	M24	95	40	202	225	8	22	175	190
	120	680	-	42	4	36	M16	M20	85	45	202	225	8	12	145	155
	140	780	52	42	4	36	M16	M24	100	45	202	225	8	10	200	220
200	115	640	-	42	4	36	M16	M20	80	35	222	245	8	12	107	115
	140	780	52	42	4	36	M16	M24	100	45	222	245	8	25	205	220
	130	720	-	42	4	36	M16	M20	95	45	222	245	8	10	187	200
	140	850	52	42	4	36	M20	M24	112	45	222	245	8	11	270	290
220	120	680	-	42	4	36	M16	M20	85	35	242	265	8	12	120	130
	140	890	52	42	4	36	M20	M24	106	50	242	265	8	26	250	270
	150	820	-	42	5	36	M20	M24	105	45	242	265	8	15	235	250
	140	900	52	42	5	36	M20	M24	122	45	242	265	8	16	345	370
240	130	720	-	42	4	36	M16	M20	92	35	262	285	8	13	153	165
	140	900	52	42	4	36	M20	M24	118	50	262	285	8	24	300	320
	160	860	-	42	5	36	M20	M24	110	50	262	285	8	13	290	310
	160	960	65	42	5	36	M20	M24	132	45	262	285	8	16	435	470
260	140	760	-	42	5	36	M16	M20	96	35	282	305	8	14	177	190
	140	900	65	42	5	36	M24	M24	120	50	282	305	8	35	325	350
	170	900	-	42	5	36	M20	M24	115	50	282	305	8	18	330	350
	170	1000	65	42	5	36	M24	M30	135	50	282	305	8	16	490	530

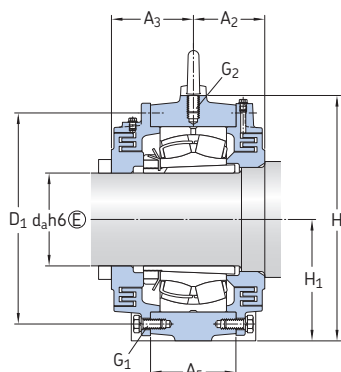
10.2

10.2 SBD plummer block housings for bearings on an adapter sleeve on stepped shafts

d_a 280 – 400 mm



Type AL
Non-locating bearing
Housing for shaft end

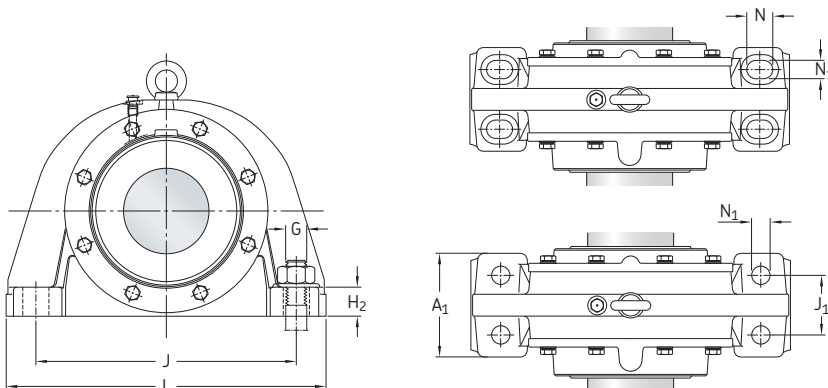


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts		Dimensions										
		Bearing ¹⁾	Adapter sleeve ²⁾	Housing										
mm	–	–	–	A ₁	A ₂	A ₃	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	
280	SBDD 3060 C	23060 CCK/W33	OH 3060 HB	250	122	167	132	144	500	570	285	85	690	
	SBDD 3160 C	23160 CCK/W33	OH 3160 HB	300	162	207	167	190	550	655	320	100	840	
	SBDD 2260 C	22260 CCK/W33	OH 3160 HB	280	160	191	152	168	585	660	330	100	820	
	SBDD 3260 C	23260 CCK/W33	OH 2360 HB	330	182	222	187	230	600	705	350	105	920	
300	SBDD 3064 C	23064 CCK/W33	OH 3064 HB	260	122	172	137	154	520	590	295	90	730	
	SBDD 3164 C	23164 CCK/W33	OH 3164 HB	300	177	212	187	210	590	702	350	100	940	
	SBDD 2264 C	22264 CCK/W33	OH 3164 HB	320	175	202	167	180	640	720	360	110	900	
	SBDD 3264 C	23264 CCK/W33	OH 2364 HB	360	192	237	187	250	640	760	370	115	960	
320	SBDD 3068 C	23068 CCK/W33	OH 3068 HB	270	132	177	147	158	565	630	315	95	770	
	SBDD 3168 C	23168 CCK/W33	OH 3168 HB	360	197	242	237	220	630	735	370	115	960	
	SBDD 3268 C	23268 CAK/W33	OH 3268 HB	380	202	272	237	265	680	810	390	125	980	
340	SBDD 3072 C	23072 CCK/W33	OH 3072 HB	280	132	182	152	168	585	660	330	100	820	
	SBDD 3172 C	23172 CCK/W33	OH 3172 HB	370	197	247	243	225	650	760	380	115	1000	
	SBDD 3272 C	23272 CAK/W33	OH 3272 HB	400	227	282	247	275	710	825	410	130	1040	
360	SBDD 3076 C	23076 CCK/W33	OH 3076 HB	300	137	187	157	168	605	680	340	105	840	
	SBDD 3176 C	23176 CAK/W33	OH 3176 HB	380	202	257	254	230	680	790	390	125	1000	
	SBDD 3276 C	23276 CAK/W33	OH 3276 HB	405	232	297	257	295	745	880	425	135	1100	
380	SBDD 3080 C	23080 CCK/W33	OH 3080 HB	320	142	202	167	180	650	720	360	110	900	
	SBDD 3180 C	23180 CAK/W33	OH 3180 HB	400	197	262	247	235	710	845	410	130	1040	
	SBDD 3280 C	23280 CAK/W33	OH 3280 HB	450	242	307	257	300	790	905	450	145	1160	
400	SBDD 3084 C	23084 CAK/W33	OH 3084 HB	340	147	202	167	180	670	750	375	115	940	
	SBDD 3184 C	23184 CKJ/W33	OH 3184 HB	420	212	289	257	260	760	900	450	135	1100	
	SBDD 3284 C	23284 CAK/W33	OH 3284 HB	470	252	317	267	315	835	955	470	150	1220	

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.

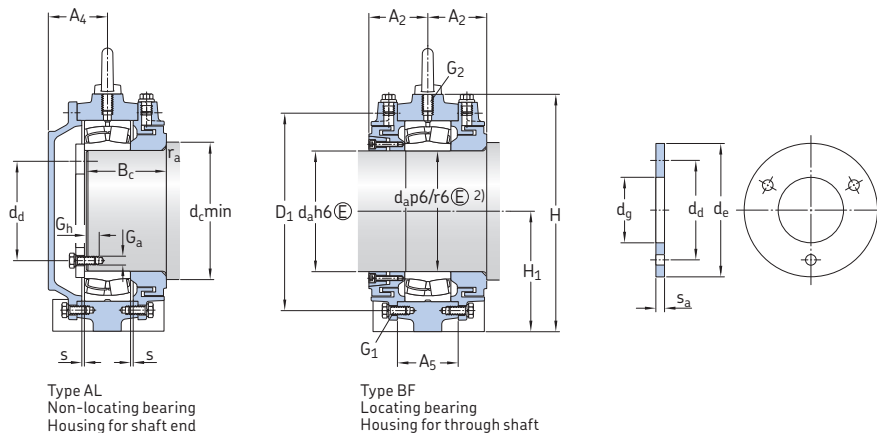


Shaft diam.	Dimensions Housing								Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet						Mass Housing type	
	J ₁	L	N	N ₁	s	G	G ₁	B _a		B _b	d _b	d _{c min}	r _a	s ₁	A	B	
mm	mm								-	mm						kg	
280	150	820	-	42	5	36	M 20	M 24	105	35	302	325	8	15	215	230	
	170	1000	65	42	5	36	M 24	M 30	125	50	302	325	8	32	400	430	
	180	960	-	42	5	36	M 20	M 24	120	50	302	325	8	17	400	430	
	180	1100	75	56	6	48	M 24	M 30	142	50	302	325	8	33	590	640	
300	160	860	-	42	5	36	M 20	M 24	108	35	322	345	8	15	240	255	
	160	1150	65	42	5	36	M 24	M 30	135	50	322	345	8	40	490	530	
	200	1060	-	56	5	48	M 24	M 30	125	55	322	345	8	26	485	520	
	200	1150	75	56	6	48	M 24	M 30	152	50	322	345	8	21	700	760	
320	170	900	-	42	6	36	M 20	M 24	120	40	342	365	8	13	280	305	
	200	1150	75	56	6	48	M 24	M 30	155	60	342	365	8	70	590	630	
	200	1200	75	60	6	56	M 24	M 36	175	50	342	365	8	47	830	900	
340	180	960	-	42	6	36	M 20	M 24	120	40	362	385	8	17	315	340	
	200	1200	75	56	6	48	M 24	M 30	160	60	362	385	8	67	660	700	
	210	1280	80	68	7	64	M 24	M 36	180	70	362	385	8	51	950	1020	
360	190	1000	-	56	6	48	M 20	M 24	124	40	382	405	8	17	350	380	
	200	1200	75	60	6	56	M 30	M 30	165	60	382	405	8	73	730	770	
	225	1350	85	68	7	64	M 30	M 36	186	70	382	405	8	55	1060	1140	
380	200	1060	-	56	6	48	M 24	M 30	134	40	402	425	8	17	420	450	
	210	1280	80	68	7	64	M 30	M 36	170	60	402	425	8	61	820	870	
	240	1430	85	68	7	64	M 30	M 36	196	70	402	425	8	45	1240	1330	
400	210	1100	-	56	6	48	M 24	M 30	135	40	422	445	8	16	465	500	
	210	1350	85	68	7	64	M 30	M 36	190	60	422	445	8	51	1000	1070	
	255	1500	90	72	8	64	M 30	M 36	212	70	422	445	8	39	1500	1600	

10.2

10.3 SBD plummer block housings for bearings on a cylindrical seat on stepped shafts

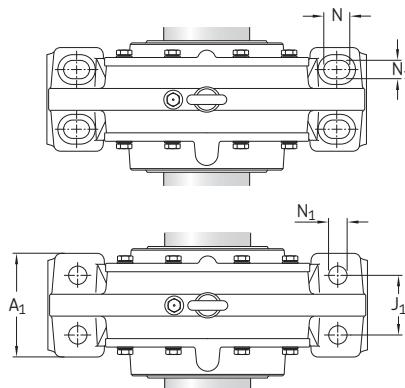
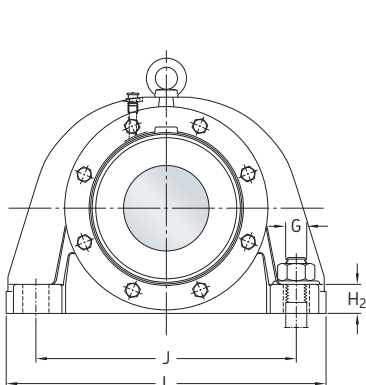
d_a 100 – 170 mm



Shaft diam. d_a	Housing	Appropriate parts		Dimensions												
		Bearing ¹⁾	Adapter ring (included)	Housing		D_1	H	H_1	H_2	J	J_1	L				
mm	–	–	–	A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L		
100	SBDD 2220 E	22220 E	PSBD 100	110	70	63	56	195	230	115	35	300	60	370		
110	SBDD 3122 E	23122 CC/W33	PSBD 110	150	81	83	80	215	270	130	40	300	80	400		
	SBDD 2222 E	22222 E	PSBD 110	120	78	68	64	215	260	130	38	340	60	410		
	SBDD 3222 E	23222 CC/W33	PSBD 110	130	91	76	90	230	285	140	42	350	70	440		
120	SBDD 3024 E	23024 CC/W33	PSBD 120	110	63	63	56	195	230	115	35	300	60	370		
	SBDD 3124 E	23124 CC/W33	PSBD 120	140	76	78	85	230	285	140	40	330	80	410		
	SBDD 2224 E	22224 E	PSBD 120	130	80,5	68	70	230	275	140	40	360	70	430		
	SBDD 3224 E	23224 CC/W33	PSBD 120	140	93	78	95	245	305	150	42	370	75	470		
130	SBDD 3026 E	23026 CC/W33	PSBD 130	120	68	68	64	215	260	130	38	340	60	410		
	SBDD 3126 E	23126 CC/W33	PSBD 130	140	80	80	90	240	295	145	40	350	80	430		
	SBDD 2226 E	22226 E	PSBD 130	140	88	70	70	245	290	145	42	370	80	455		
	SBDD 3226 E	23226 CC/W33	PSBD 130	150	103	78	100	260	325	160	45	400	85	500		
140	SBDD 3028 E	23028 CC/W33	PSBD 140	130	68	68	70	230	275	140	40	360	70	430		
	SBDD 3128 E	23128 CC/W33	PSBD 140	150	85	85	95	260	315	155	45	380	85	470		
	SBDD 2228 E	22228 CC/W33	PSBD 140	160	94	83	82	275	330	165	50	420	95	510		
	SBDD 3228 E	23228 CC/W33	PSBD 140	160	108	88	110	285	350	170	50	430	85	530		
150	SBDD 3030 E	23030 CC/W33	PSBD 150	140	78	70	76	245	290	145	42	370	90	455		
	SBDD 3130 E	23130 CC/W33	PSBD 150	200	93	93	102	285	345	170	60	450	110	580		
	SBDD 2230 E	22230 CC/W33	PSBD 150	170	98	88	90	300	360	180	52	450	100	540		
	SBDD 3230 E	23230 CC/W33	PSBD 150	170	113	93	120	305	375	180	54	450	90	550		
160	SBDD 3032 E	23032 CC/W33	PSBD 160	150	78	76	76	260	310	155	45	390	90	480		
	SBDD 3132 E	23132 CC/W33	PSBD 160	200	98	98	110	310	368	180	55	430	110	540		
	SBDD 2232 E	22232 CC/W33	PSBD 160	180	101	88	96	315	370	185	55	480	105	570		
	SBDD 3232 E	23232 CC/W33	PSBD 160	180	118	98	130	330	395	190	58	490	105	600		
170	SBDD 3034 E	23034 CC/W33	PSBD 170	160	78	83	82	280	330	165	50	420	95	510		
	SBDD 3134 E	23134 CC/W33	PSBD 170	200	113	112	120	330	395	190	60	470	110	570		
	SBDD 2234 E	22234 CC/W33	PSBD 170	190	112,5	97	104	335	400	200	60	510	110	600		
	SBDD 3234 E	23234 CC/W33	PSBD 170	200	128	103	135	345	410	200	62	525	110	640		

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

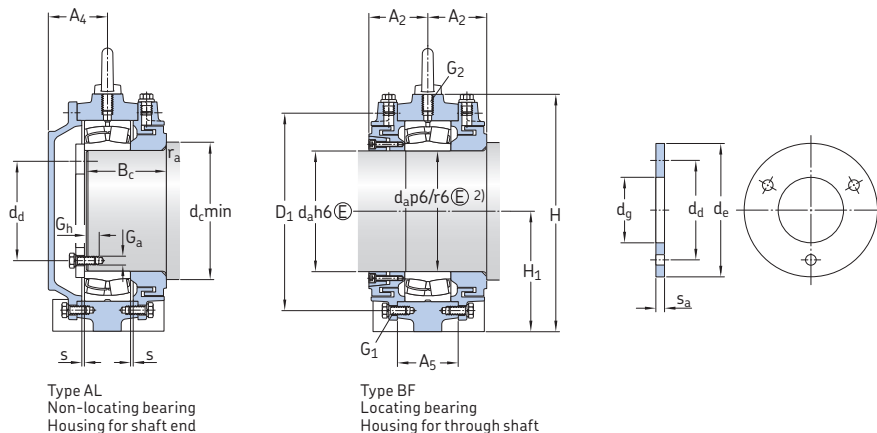
²⁾ Tolerance p6 for shaft diameters up to 140 mm and tolerance r6 for larger sizes.



Shaft diam.	Dimensions Housing					Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet					End plate				Mass Housing type		
	d _a	N	N ₁	s	G		G ₁	B _c	d _c min	r _a	G _a	G _H	d _d	d _e	d _{gmax}	s _a	attachment bolts (for end plate)	A
mm	mm					-	mm									kg		
100	-	24	2	20	M8	M12	90	115	4	M10	18	75	115	35	10	M10×30	23	25
110	35	25	2	20	M12	M12	107	125	4	M8	15	90	122	58	8	M8×25	40	45
	-	24	2	20	M8	M12	102	125	4	M10	18	85	128	42	10	M10×30	37	40
	35	30	2	24	M12	M16	123	125	4	M8	15	90	128	45	8	M8×25	46	50
120	-	24	2	20	M8	M12	84	135	4	M10	18	95	132	58	10	M10×30	19	20
	35	25	3	20	M12	M12	105	135	4	M8	15	100	133	67	8	M8×25	45	50
	-	28	3	24	M8	M12	107	135	4	M10	18	95	138	52	10	M10×30	43	46
	35	30	2	24	M12	M16	128	135	4	M10	18	95	138	45	10	M10×30	50	55
130	-	24	2	20	M8	M12	92	150	6	M10	18	105	145	65	10	M10×30	28	30
	35	25	2	20	M12	M12	110	150	6	M8	15	110	145	75	8	M8×25	50	55
	-	28	3	24	M10	M12	117	150	6	M10	18	105	150	60	10	M10×30	52	56
	40	30	2	24	M12	M16	140	150	6	M10	18	105	150	55	10	M10×30	60	65
140	-	28	3	24	M8	M12	92	160	6	M10	18	115	155	75	10	M10×30	32	35
	35	25	2	20	M12	M12	116	160	6	M10	18	115	155	75	10	M10×30	58	65
	-	35	3	30	M10	M12	125	160	6	M10	18	115	162	68	10	M10×30	65	70
	40	30	3	24	M16	M20	145	160	6	M10	18	115	160	60	10	M10×30	74	80
150	-	28	3	24	M10	M12	104	170	6	M10	18	125	165	85	10	M10×30	37	40
	45	35	3	24	M12	M16	130	170	6	M10	18	125	165	85	10	M10×30	78	85
	-	35	3	30	M12	M16	132	170	6	M10	18	125	175	75	10	M10×30	77	82
	45	35	3	30	M16	M20	158	170	6	M10	18	125	170	85	10	M10×30	87	95
160	-	28	3	24	M10	M12	105	185	8	M10	18	135	175	95	10	M10×30	41	45
	40	30	3	24	M12	M16	138	185	8	M10	18	135	175	95	10	M10×30	90	100
	-	35	3	30	M12	M16	138	185	8	M12	20	130	185	75	12	M12×30	90	96
	45	35	3	30	M16	M20	167	185	8	M12	20	130	185	70	12	M12×30	100	110
170	-	35	3	30	M10	M12	109	195	8	M10	18	145	185	105	10	M10×30	50	55
	45	35	3	30	M12	M20	154	195	8	M10	18	145	185	105	10	M10×30	100	110
	-	35	4	30	M12	M16	152	195	8	M16	25	130	200	60	16	M16×45	103	110
	45	35	3	30	M16	M20	179	195	8	M12	20	140	195	75	12	M12×30	130	140

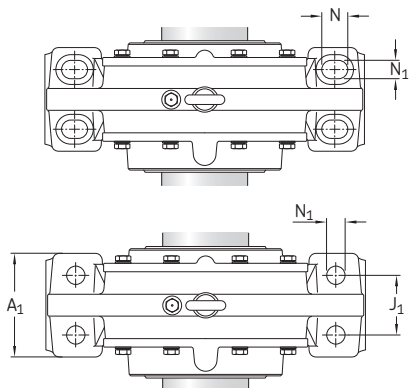
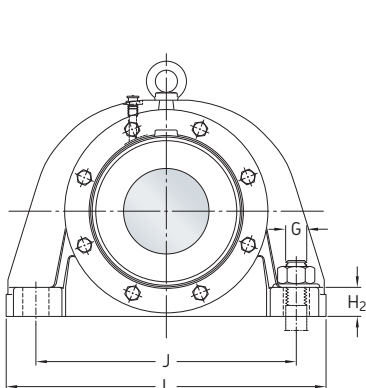
10.3 SBD plummer block housings for bearings on a cylindrical seat on stepped shafts

d_a 180 – 280 mm



Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter ring (included)	Dimensions Housing										
				A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L
mm	-	-	-	mm										
180	SBDD 3036 E	23036 CC/W33	PSBD 180	170	88	88	90	305	360	180	52	450	100	540
	SBDD 3136 E	23136 CC/W33	PSBD 180	200	118	116	125	350	410	200	60	490	105	600
	SBDD 2236 E	22236 CC/W33	PSBD 180	200	118	102	110	360	430	215	65	540	115	640
	SBDD 3236 E	23236 CC/W33	PSBD 180	210	133	108	140	360	430	210	65	550	120	680
190	SBDD 3038 E	23038 CC/W33	PSBD 190	180	93	88	96	315	370	185	55	480	105	570
	SBDD 3138 E	23138 CC/W33	PSBD 190	210	123	120	130	370	435	210	65	550	120	680
	SBDD 2238 E	22238 CC/W33	PSBD 190	200	118	102	110	370	430	215	65	540	115	640
	SBDD 3238 E	23238 CC/W33	PSBD 190	220	138	113	150	385	455	220	75	560	120	710
200	SBDD 3040 E	23040 CC/W33	PSBD 200	190	97	97	104	340	400	200	60	510	110	600
	SBDD 3140 E	23140 CC/W33	PSBD 200	220	127	127	135	380	455	220	85	560	120	710
	SBDD 2240 E	22240 CC/W33	PSBD 200	210	122	107	118	390	450	225	70	560	120	680
	SBDD 3240 E	23240 CC/W33	PSBD 200	240	138	118	165	405	475	235	75	640	140	780
220	SBDD 3044 E	23044 CC/W33	PSBD 220	200	102	102	110	370	430	215	65	540	115	640
	SBDD 3144 E	23144 CC/W33	PSBD 220	230	135	135	150	420	485	235	75	640	140	780
	SBDD 2244 E	22244 CC/W33	PSBD 220	220	124,5	117	128	435	500	250	75	600	130	720
	SBDD 3244 E	23244 CC/W33	PSBD 220	250	148	133	175	445	525	260	80	700	140	850
240	SBDD 3048 E	23048 CC/W33	PSBD 240	210	102	107	118	290	450	225	70	560	120	680
	SBDD 3148 E	23148 CC/W33	PSBD 240	250	152	142	160	455	550	270	80	720	140	890
	SBDD 2248 E	22248 CC/W33	PSBD 240	250	130	132	144	490	570	285	85	690	150	820
	SBDD 3248 E	23248 CC/W33	PSBD 240	250	148	148	190	490	590	290	90	750	140	900
260	SBDD 3052 E	23052 CC/W33	PSBD 260	220	107	117	128	435	500	250	75	600	130	720
	SBDD 3152 E	23152 CC/W33	PSBD 260	250	152	152	175	490	590	290	90	750	140	900
	SBDD 2252 E	22252 CC/W33	PSBD 260	260	145	137	154	520	590	295	90	730	160	860
	SBDD 3252 E	23252 CC/W33	PSBD 260	290	167	158	205	535	625	310	95	800	160	960
280	SBDD 3056 E	23056 CC/W33	PSBD 280	240	117	122	128	455	520	260	80	630	140	760
	SBDD 3156 E	23156 CC/W33	PSBD 280	250	157	165	175	510	590	290	90	750	140	900
	SBDD 2256 E	22256 CC/W33	PSBD 280	270	152	147	158	555	630	315	95	770	170	900
	SBDD 3256 E	23256 CC/W33	PSBD 280	300	178	163	210	555	645	320	100	840	170	1000

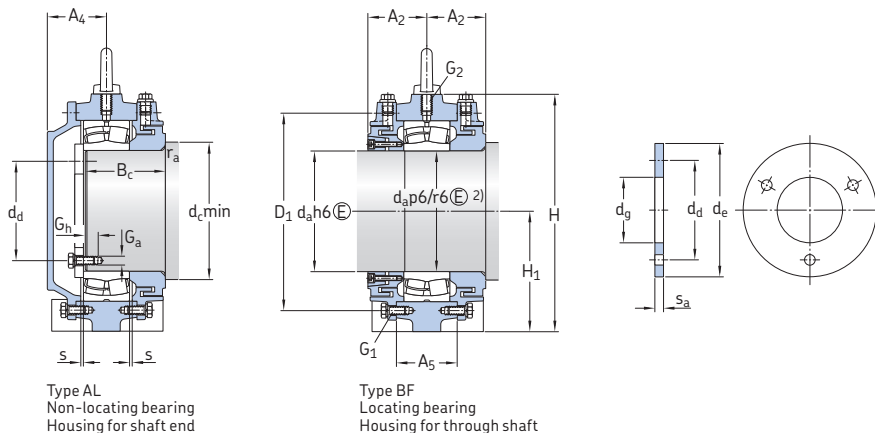
¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.



Shaft diam.	Dimensions Housing					Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet					End plate					Mass Housing type	
	N	N ₁	s	G	G ₁		B _c	d _c min	r _a	G _a	G _H	d _d	d _e	d _{gmax}	s _a	attachment bolts (for end plate)	A	B
mm	mm					-	mm										kg	
180	-	35	3	30	M12	M16	122	205	8	M10	18	155	195	115	10	M10x30	64	70
	45	35	3	30	M16	M20	163	205	8	M12	20	150	195	105	12	M12x30	118	130
	-	42	4	36	M16	M20	157	205	8	M16	25	140	210	70	16	M16x45	112	120
	45	35	3	30	M16	M20	185	205	8	M12	20	150	205	85	12	M12x30	147	160
190	-	35	3	30	M12	M16	128	215	8	M12	20	160	205	115	12	M12x30	74	80
	45	35	3	36	M16	M20	172	215	8	M12	20	160	210	110	12	M12x30	146	160
	-	42	4	36	M16	M20	160	215	8	M16	25	150	220	80	16	M16x45	126	135
	45	35	4	30	M16	M20	197	215	8	M12	20	160	215	95	12	M12x30	170	185
200	-	35	4	30	M12	M16	135	225	8	M16	25	160	215	105	16	M16x45	83	90
	52	42	3	36	M16	M24	180	225	8	M12	20	170	220	120	12	M12x30	175	190
	-	42	4	36	M16	M20	167	225	8	M20	30	150	235	65	20	M20x55	145	155
	52	42	4	36	M16	M24	198	225	8	M16	25	160	230	80	16	M16x45	200	220
220	-	42	4	36	M16	M20	144	245	8	M16	25	180	240	120	16	M16x45	107	115
	52	42	4	36	M16	M24	191	245	8	M16	25	180	245	115	16	M16x45	205	220
	-	42	4	36	M16	M20	175	245	8	M20	30	170	260	80	20	M20x55	187	200
	52	42	4	36	M20	M24	216	245	8	M16	25	180	255	95	16	M16x45	270	290
240	-	42	4	36	M16	M20	145	265	8	M20	30	190	260	120	20	M20x55	120	130
	52	42	4	36	M20	M24	212	265	8	M16	25	200	265	135	16	M16x45	250	270
	-	42	5	36	M20	M24	186	265	8	M20	30	190	285	95	20	M20x55	235	250
	52	42	5	36	M20	M24	224	265	8	M16	25	200	280	110	16	M16x45	345	370
260	-	42	4	36	M16	M20	155	285	8	M20	30	210	285	135	20	M20x55	153	165
	52	42	4	36	M20	M24	220	285	8	M16	25	220	285	155	16	M16x45	300	320
	-	42	5	36	M20	M24	205	285	8	M20	30	210	305	95	20	M20x55	290	310
	65	42	5	36	M20	M24	249	285	8	M16	25	220	305	115	16	M16x45	435	470
280	-	42	5	36	M16	M20	166	305	8	M20	30	230	305	155	20	M20x55	177	190
	65	42	5	36	M24	M24	225	305	8	M16	25	240	305	175	16	M16x45	325	350
	-	42	5	36	M20	M24	212	305	8	M24	35	220	325	195	24	M24x65	330	350
	65	42	5	36	M24	M30	261	305	8	M20	30	230	325	80	20	M20x55	490	530

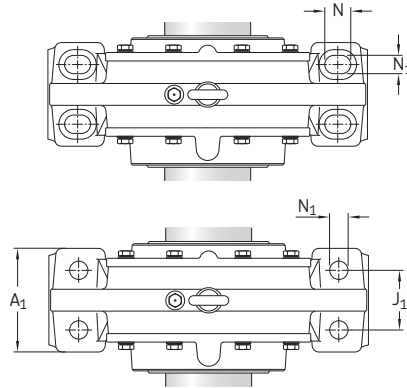
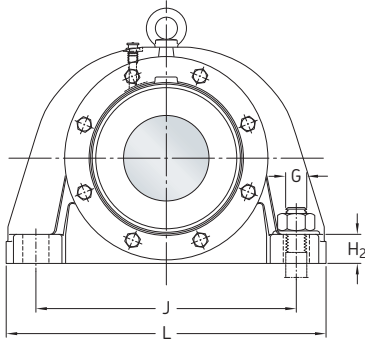
10.3 SBD plummer block housings for bearings on a cylindrical seat on stepped shafts

d_a 300 – 240 mm



Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter ring (included)	Dimensions Housing										
				A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L
mm	-	-		mm										
300	SBDD 3060 E	23060 CC/W33	PSBD 300	250	122	132	144	500	570	285	85	690	150	820
	SBDD 3160 E	23160 CC/W33	PSBD 300	300	162	167	190	550	655	320	100	840	170	1000
	SBDD 2260 E	22260 CC/W33	PSBD 300	280	160	152	168	585	660	330	100	820	180	960
	SBDD 3260 E	23260 CC/W33	PSBD 300	330	182	187	230	600	705	350	105	920	180	1100
320	SBDD 3064 E	23064 CC/W33	PSBD 320	260	122	137	154	520	590	295	90	730	160	860
	SBDD 3164 E	23164 CC/W33	PSBD 320	300	177	187	210	590	702	350	100	940	160	1150
	SBDD 2264 E	22264 CC/W33	PSBD 320	320	175	167	180	640	720	360	110	900	200	1060
	SBDD 3264 E	23264 CC/W33	PSBD 320	360	192	187	250	640	760	370	115	960	200	1150
340	SBDD 3068 E	23068 CC/W33	PSBD 340	270	132	147	158	565	630	315	95	770	170	900
	SBDD 3168 E	23168 CC/W33	PSBD 340	360	197	237	220	630	735	370	115	960	200	1150
	SBDD 3268 E	23268 CA/W33	PSBD 340	380	202	237	265	680	810	390	125	980	200	1200
360	SBDD 3072 E	23072 CC/W33	PSBD 360	280	132	152	168	585	660	330	100	820	180	960
	SBDD 3172 E	23172 CC/W33	PSBD 360	370	197	243	225	650	760	380	115	1000	200	1200
	SBDD 3272 E	23272 CA/W33	PSBD 360	400	227	247	275	710	825	410	130	1040	210	1280
380	SBDD 3076 E	23076 CC/W33	PSBD 380	300	137	157	168	605	680	340	105	840	190	1000
	SBDD 3176 E	23176 CA/W33	PSBD 380	380	202	254	230	680	790	390	125	1000	200	1200
	SBDD 3276 E	23276 CA/W33	PSBD 380	405	232	257	295	745	880	425	135	1100	225	1350
400	SBDD 3080 E	23080 CC/W33	PSBD 400	320	142	167	180	650	720	360	110	900	200	1060
	SBDD 3180 E	23180 CA/W33	PSBD 400	400	197	247	235	710	845	410	130	1040	210	1280
	SBDD 3280 E	23280 CA/W33	PSBD 400	450	242	257	300	790	905	450	145	1160	240	1430
420	SBDD 3084 E	23084 CA/W33	PSBD 420	340	147	167	180	670	750	375	115	940	210	1100
	SBDD 3184 E	23184 CJ/W33	PSBD 420	420	212	257	260	760	900	450	135	1100	210	1350
	SBDD 3284 E	23284 CA/W33	PSBD 420	470	252	267	315	835	955	470	150	1220	255	1500

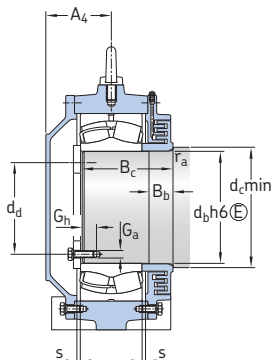
¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.



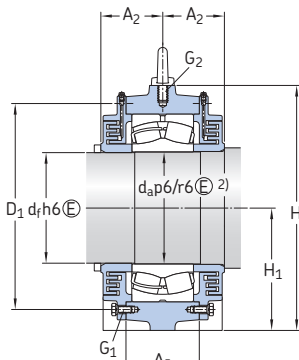
Shaft diam.	Dimensions Housing					Eye bolt acc. to DIN 580 G ₂	Dimensions Shaft abutment and fillet					End plate				Mass Housing type		
	N	N ₁	s	G	G ₁		B _c	d _c min	r _a	G _a	G _H	d _d	d _e	d _{gmax}	s _a	attachment bolts (for end plate)	A	B
mm	mm					-	mm									kg		
300	-	42	5	36	M 20	M 24	177	325	8	M 20	30	250	325	175	20	M 20x55	215	230
	65	42	5	36	M 24	M 30	237	325	8	M 20	30	250	325	175	20	M 20x55	400	430
	-	42	5	36	M 20	M 24	225	325	8	M 24	35	240	350	105	24	M 24x65	400	430
	75	56	6	48	M 24	M 30	273	325	8	M 20	30	250	350	120	20	M 20x55	590	640
320	-	42	5	36	M 20	M 24	179	345	8	M 20	30	270	345	195	20	M 20x55	240	255
	65	42	5	36	M 24	M 30	260	345	8	M 20	30	270	350	190	20	M 20x55	490	530
	-	56	5	48	M 24	M 30	245	345	8	M 24	35	260	375	120	24	M 24x65	485	520
	75	56	6	48	M 24	M 30	291	345	8	M 24	35	260	375	110	24	M 24x65	700	760
340	-	42	6	36	M 20	M 24	194	365	8	M 24	35	280	370	190	24	M 24x65	280	305
	75	56	6	48	M 24	M 30	287	365	8	M 24	35	280	370	190	24	M 24x65	590	630
	75	60	6	56	M 24	M 36	308	365	8	M 24	35	280	420	125	24	M 24x65	830	900
360	-	42	6	36	M 20	M 24	194	385	8	M 24	35	300	390	210	24	M 24x65	315	340
	75	56	6	48	M 24	M 30	288	385	8	M 24	35	300	390	210	24	M 24x65	660	700
	80	68	7	64	M 24	M 36	337	385	8	M 24	35	300	440	145	24	M 24x65	950	1020
380	-	56	6	48	M 20	M 24	200	405	8	M 24	35	320	410	230	24	M 24x65	350	380
	75	60	6	56	M 30	M 30	294	405	8	M 24	35	320	410	230	24	M 24x65	730	770
	85	68	7	64	M 30	M 36	346	405	8	M 30	45	305	465	130	30	M 30x80	1060	1140
400	-	56	6	48	M 24	M 30	211	425	8	M 24	35	340	430	250	24	M 24x65	420	450
	80	68	7	64	M 30	M 36	291	425	8	M 24	35	340	430	250	24	M 24x65	820	870
	85	68	7	64	M 30	M 36	364	425	8	M 30	45	325	495	145	30	M 30x80	1240	1330
420	-	56	6	48	M 24	M 30	217	445	8	M 30	40	345	450	240	30	M 30x80	465	500
	85	68	7	64	M 30	M 36	318	445	8	M 30	45	345	450	240	30	M 30x80	1000	1070
	90	72	8	64	M 30	M 36	380	445	8	M 30	45	345	520	155	30	M 30x80	1500	1600

10.4 SBD plummer block housings for bearings on a cylindrical seat on multi-stepped shafts

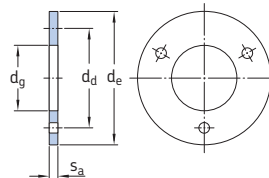
d_a 100 – 170 mm



Type AL
Non-locating bearing
Housing for shaft end



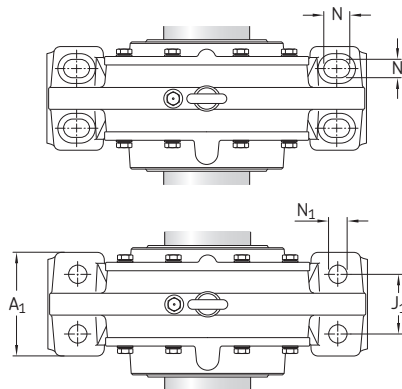
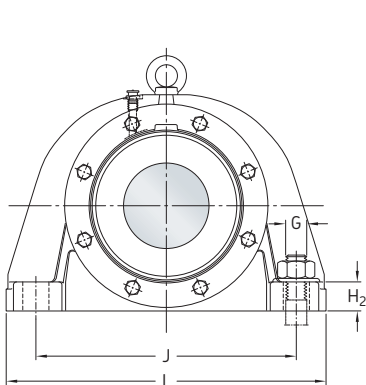
Type BF
Locating bearing
Housing for through shaft



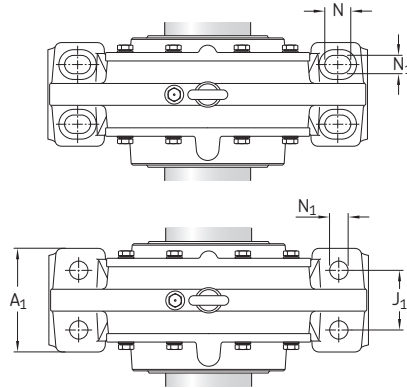
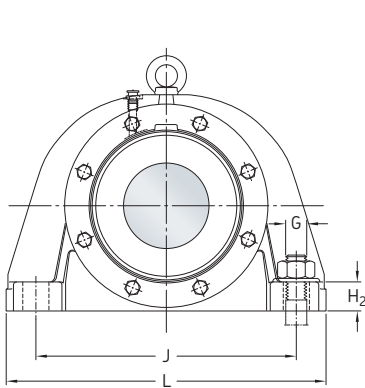
Shaft diam.	Housing	Appropriate bearing ¹⁾	Dimensions Housing											
			A ₁	A ₂	A ₄	A ₅	D ₁	H	H ₁	H ₂	J	J ₁	L	N
d_a	–	–	mm											
100	SBDD 2220 G	22220 E	110	70	63	56	195	230	115	35	300	60	370	–
110	SBDD 3122 G	23122 CC/W33	150	81	83	80	215	270	130	40	300	80	400	35
	SBDD 2222 G	22222 E	120	78	68	64	215	260	130	38	340	60	410	–
	SBDD 3222 G	23222 CC/W33	130	91	76	90	230	285	140	42	350	70	440	35
120	SBDD 3024 G	23024 CC/W33	110	63	63	56	195	230	115	35	300	60	370	–
	SBDD 3124 G	23124 CC/W33	140	76	78	85	230	285	140	40	330	80	410	35
	SBDD 2224 G	22224 E	130	80,5	68	70	230	275	140	40	360	70	430	–
	SBDD 3224 G	23224 CC/W33	140	93	78	95	245	305	150	42	370	75	470	35
130	SBDD 3026 G	23026 CC/W33	120	68	68	64	215	260	130	38	340	60	410	–
	SBDD 3126 G	23126 CC/W33	140	80	80	90	240	295	145	40	350	80	430	35
	SBDD 2226 G	22226 E	140	88	70	70	245	290	145	42	370	80	455	–
	SBDD 3226 G	23226 CC/W33	150	103	78	100	260	325	160	45	400	85	500	40
140	SBDD 3028 G	23028 CC/W33	130	68	68	70	230	275	140	40	360	70	430	–
	SBDD 3128 G	23128 CC/W33	150	85	85	95	260	315	155	45	380	85	470	35
	SBDD 2228 G	22228 CC/W33	160	94	83	82	275	330	165	50	420	95	510	–
	SBDD 3228 G	23228 CC/W33	160	108	88	110	285	350	170	50	430	85	530	40
150	SBDD 3030 G	23030 CC/W33	140	78	70	76	245	290	145	42	370	80	455	–
	SBDD 3130 G	23130 CC/W33	200	93	93	102	285	345	170	60	450	110	580	45
	SBDD 2230 G	22230 CC/W33	170	98	88	90	300	360	180	52	450	100	540	–
	SBDD 3230 G	23230 CC/W33	170	113	93	120	305	375	180	54	450	90	550	45
160	SBDD 3032 G	23032 CC/W33	150	78	76	76	260	310	155	45	390	90	480	–
	SBDD 3132 G	23132 CC/W33	200	98	98	110	310	368	180	55	430	110	540	40
	SBDD 2232 G	22232 CC/W33	180	101	88	96	315	370	185	55	480	105	570	–
	SBDD 3232 G	23232 CC/W33	180	118	98	130	330	395	190	58	490	105	600	45
170	SBDD 3034 G	23034 CC/W33	160	78	83	82	280	330	165	50	420	95	510	–
	SBDD 3134 G	23134 CC/W33	200	113	112	120	330	395	190	60	470	110	570	45
	SBDD 2234 G	22234 CC/W33	190	112,5	97	104	335	400	200	60	510	110	600	–
	SBDD 3234 G	23234 CC/W33	200	128	103	135	345	410	200	62	525	110	640	45

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Tolerance p6 for shaft diameters up to 140 mm and tolerance r6 for larger sizes.



Shaft diam.	Dimensions Housing				Eye bolt acc. to DIN 580	Dimensions Shaft abutment and fillet										End plate					Mass Housing type			
	d_a	N_1	s	G		G_1	G_2	B_b	B_c	d_b	d_c	d_f	r_a	G_a	G_h	d_d	d_e	d_{gmax}	s_a	attachment bolts (for end plate)	A	B	kg	
mm	mm				-	mm										mm							kg	
100	24	2	20	M8	M12	-	35	90	102	115	98	4	M10	18	75	115	35	10	M10x30	23	25			
110	25	2	20	M12	M12	-	30	107	112	125	108	4	M8	15	90	122	58	8	M8x25	40	45			
	24	2	20	M8	M12	-	35	102	112	125	108	4	M10	18	85	128	42	10	M10x30	37	40			
	30	2	24	M12	M16	-	32	123	112	125	108	4	M8	15	90	128	45	8	M8x25	46	50			
120	24	2	20	M8	M12	-	25	84	122	135	118	4	M10	18	95	132	58	10	M10x30	19	20			
	25	2	20	M12	M12	-	30	105	122	135	118	4	M8	15	100	133	67	8	M8x25	45	50			
	28	3	24	M8	M12	-	35	107	122	135	118	4	M10	18	95	138	52	10	M10x30	43	46			
	30	2	24	M12	M16	-	32	128	122	135	118	4	M10	18	95	138	45	10	M10x30	50	55			
130	24	2	20	M8	M12	-	25	92	132	150	128	6	M10	18	105	145	65	10	M10x30	28	30			
	25	2	20	M12	M12	-	30	110	132	150	128	6	M8	15	110	145	75	8	M8x25	50	55			
	28	3	24	M10	M12	-	40	117	132	150	128	6	M10	18	105	150	60	10	M10x30	52	56			
	30	2	24	M12	M16	-	35	140	132	150	128	6	M10	18	105	150	55	10	M10x30	60	65			
140	28	3	24	M8	M12	-	25	92	142	160	138	6	M10	18	115	155	75	10	M10x30	32	35			
	25	2	20	M12	M12	-	30	116	142	160	138	6	M10	18	115	155	75	10	M10x30	58	65			
	35	3	30	M10	M12	-	40	125	142	160	138	6	M10	18	115	162	68	10	M10x30	65	70			
	30	3	24	M16	M20	-	35	145	142	160	138	6	M10	18	115	160	60	10	M10x30	74	80			
150	28	3	24	M10	M12	-	25	99	152	170	148	6	M10	18	125	165	85	10	M10x30	37	40			
	35	3	24	M12	M16	-	30	130	152	170	148	6	M10	18	125	165	85	10	M10x30	78	85			
	35	3	30	M10	M16	-	40	132	152	170	148	6	M10	18	125	175	75	10	M10x30	77	82			
	35	3	30	M16	M20	-	40	158	152	170	148	6	M10	18	125	170	70	10	M10x30	87	95			
160	28	3	24	M10	M12	-	30	105	162	185	158	8	M10	18	135	175	95	10	M10x30	41	45			
	30	3	24	M12	M16	-	30	138	162	185	158	8	M10	18	135	178	92	10	M10x30	90	100			
	35	3	30	M12	M16	-	40	138	162	185	158	8	M12	20	130	185	75	12	M12x30	90	96			
	35	3	30	M16	M20	-	40	167	162	185	158	8	M12	20	130	185	70	12	M12x30	100	110			
170	35	3	30	M10	M12	-	30	109	172	195	168	8	M10	18	145	185	105	10	M10x30	50	55			
	35	3	30	M12	M20	-	40	154	172	195	168	8	M10	18	145	185	105	10	M10x30	100	110			
	35	4	30	M12	M16	-	45	152	172	195	168	8	M16	25	130	200	60	16	M16x45	103	110			
	35	3	30	M16	M20	-	40	179	172	195	168	8	M12	20	140	195	75	12	M12x30	130	140			

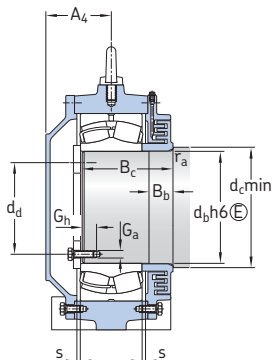


Shaft diam.	Dimensions Housing					Eye bolt acc. to DIN 580		Dimensions Shaft abutment and fillet							End plate						Mass Housing type		
	d_a	N_1	s	G	G_1	G_2	G_2	B_b	B_c	d_b	d_c	d_f	r_a	G_a	G_h	d_d	d_e	d_{gmax}	s_a	attachment bolts (for end plate)		A	B
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
180	35	3	30	M12	M16			30	117	182	205	178	8	M10	18	155	195	115	10	M10x30	64	70	
	35	3	30	M16	M20			40	163	182	205	178	8	M12	20	150	195	105	12	M12x30	118	130	
	42	4	36	M16	M20			45	157	182	205	178	8	M16	25	140	210	70	16	M16x45	112	120	
	35	3	30	M16	M20			45	185	182	205	178	8	M12	20	150	205	85	12	M12x30	147	160	
190	35	3	30	M12	M16			30	128	192	215	188	8	M12	20	160	205	115	12	M12x30	74	80	
	35	3	36	M16	M20			40	172	192	215	188	8	M12	20	160	210	110	12	M12x30	146	160	
	42	4	36	M16	M20			45	160	192	215	188	8	M16	25	150	220	80	16	M16x45	126	135	
	35	4	30	M16	M20			45	197	192	215	188	8	M12	20	160	215	95	12	M12x30	170	185	
200	35	4	30	M12	M16			35	135	202	225	198	8	M16	25	160	215	105	16	M16x45	83	90	
	42	3	36	M16	M24			40	180	202	225	198	8	M12	20	170	220	120	12	M12x30	175	190	
	42	4	36	M16	M20			45	167	202	225	198	8	M20	30	150	235	65	20	M20x55	145	155	
	42	4	36	M16	M24			45	198	202	225	198	8	M16	25	160	230	80	16	M16x45	200	220	
220	42	4	36	M16	M20			35	144	222	245	218	8	M16	25	180	240	120	16	M16x45	107	115	
	42	4	36	M16	M24			45	191	222	245	218	8	M16	25	180	245	115	16	M16x45	205	220	
	42	4	36	M16	M20			45	175	222	245	218	8	M20	30	170	260	80	20	M20x55	187	200	
	42	4	36	M20	M24			45	216	222	245	218	8	M16	25	180	255	95	16	M16x45	270	290	
240	42	4	36	M16	M20			35	145	242	265	238	8	M20	30	190	260	120	20	M20x55	120	130	
	42	4	36	M20	M24			50	212	242	265	238	8	M16	25	200	265	135	16	M16x45	250	270	
	42	5	36	M20	M24			45	186	242	265	238	8	M20	30	190	285	95	20	M20x55	235	250	
	42	5	36	M20	M24			45	224	242	265	238	8	M16	25	200	290	110	16	M16x45	345	370	
260	42	4	36	M16	M20			35	155	262	285	258	8	M20	30	210	285	135	20	M20x55	153	165	
	42	4	36	M20	M24			50	220	262	285	258	8	M16	25	220	285	155	16	M16x45	300	320	
	42	5	36	M20	M24			50	205	262	285	258	8	M20	30	210	305	95	20	M20x55	290	310	
	42	5	36	M20	M24			45	249	262	285	258	8	M16	25	220	305	115	16	M16x45	435	470	
280	42	5	36	M16	M20			35	166	282	305	278	8	M20	30	230	305	155	20	M20x55	177	190	
	42	5	36	M24	M24			50	225	282	305	278	8	M16	25	240	305	175	16	M16x45	325	350	
	42	5	36	M20	M24			50	212	282	305	278	8	M24	35	220	325	195	24	M24x65	330	350	
	42	5	36	M24	M30			50	261	282	305	278	8	M20	30	230	325	80	20	M20x55	490	530	

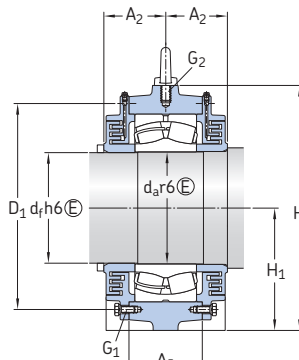
10.4

10.4 SBD plummer block housings for bearings on a cylindrical seat on multi-stepped shafts

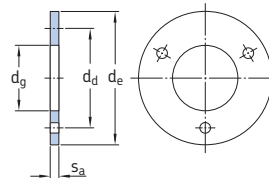
d_a 300 – 420 mm



Type AL
Non-locating bearing
Housing for shaft end

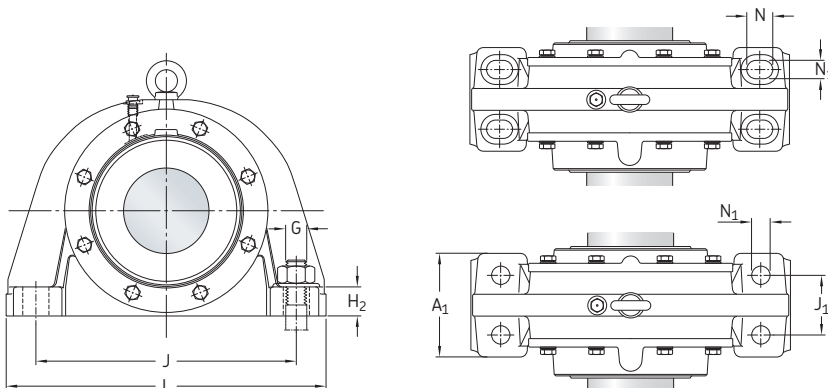


Type BF
Locating bearing
Housing for through shaft



Shaft diam.	Housing	Appropriate bearing ¹⁾	Dimensions Housing											
			A_1	A_2	A_4	A_5	D_1	H	H_1	H_2	J	J_1	L	N
d_a	–	–	mm											
300	SBDD 3060 G	23060 CC/W33	250	122	132	144	500	570	285	85	690	150	820	–
	SBDD 3160 G	23160 CC/W33	300	162	167	190	550	655	320	100	840	170	1000	65
	SBDD 2260 G	22260 CC/W33	280	160	152	168	585	660	330	100	820	180	960	–
	SBDD 3260 G	23260 CC/W33	330	182	187	230	600	705	350	105	920	180	1100	75
320	SBDD 3064 G	23064 CC/W33	260	122	137	154	520	590	295	90	730	160	860	–
	SBDD 3164 G	23164 CC/W33	300	177	187	210	590	702	350	100	940	160	1150	65
	SBDD 2264 G	22264 CC/W33	320	175	167	180	640	720	360	110	900	200	1060	–
	SBDD 3264 G	23264 CC/W33	360	192	187	250	640	760	370	115	960	200	1150	75
340	SBDD 3068 G	23068 CC/W33	270	132	147	158	565	630	315	95	770	170	900	–
	SBDD 3168 G	23168 CC/W33	360	197	237	220	630	735	370	115	960	200	1150	75
	SBDD 3268 G	23268 CA/W33	380	202	237	265	680	810	390	125	980	200	1200	75
360	SBDD 3072 G	23072 CC/W33	280	132	152	168	585	660	330	100	820	180	960	–
	SBDD 3172 G	23172 CC/W33	370	197	243	225	650	760	380	115	1000	200	1200	75
	SBDD 3272 G	23272 CA/W33	400	227	247	275	710	825	410	130	1040	210	1280	80
380	SBDD 3076 G	23076 CC/W33	300	137	157	168	605	680	340	105	840	190	1000	–
	SBDD 3176 G	23176 CA/W33	380	202	254	230	680	790	390	125	1000	200	1200	75
	SBDD 3276 G	23276 CA/W33	405	232	257	295	745	880	425	135	1100	225	1350	85
400	SBDD 3080 G	23080 CC/W33	320	142	167	180	650	720	360	110	900	200	1060	–
	SBDD 3180 G	23180 CA/W33	400	197	247	235	710	845	410	130	1040	210	1280	80
	SBDD 3280 G	23280 CA/W33	450	242	257	300	790	905	450	145	1160	240	1430	85
420	SBDD 3084 G	23084 CA/W33	340	147	167	180	670	750	375	115	940	210	1100	–
	SBDD 3184 G	23184 CJ/W33	420	212	257	260	760	900	450	135	1100	210	1350	85
	SBDD 3284 G	23284 CA/W33	470	252	267	315	835	955	470	150	1220	255	1500	90

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

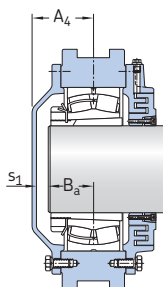


Shaft diam.	Dimensions Housing				Eye bolt acc. to DIN 580	Dimensions Shaft abutment and fillet							End plate					Mass Housing type			
	d_a	N_1	s	G		G_1	G_2	B_b	B_c	d_b	d_c min	d_f	r_a	G_a	G_h	d_d	d_e	d_{gmax}	s_a	attachment bolts (for end plate)	A
mm	mm				-	mm					-	mm								kg	
300	42	5	36	M20	M24	35	177	302	325	298	8	M20	30	250	325	175	20	M20x55	215	230	
	42	5	36	M24	M30	50	237	302	325	298	8	M20	30	250	325	175	20	M20x55	400	430	
	42	5	36	M20	M24	50	225	302	325	298	8	M24	35	240	350	105	24	M24x65	400	430	
	56	6	48	M24	M30	50	273	302	325	298	8	M20	30	250	350	120	20	M20x55	590	640	
320	42	5	36	M20	M24	35	179	322	345	318	8	M20	30	270	345	195	20	M20x55	240	255	
	42	5	36	M24	M30	50	260	322	345	318	8	M20	30	270	350	190	20	M20x55	490	530	
	56	5	48	M24	M30	55	245	322	345	318	8	M24	35	260	375	120	24	M24x65	485	520	
	56	6	48	M24	M30	50	291	322	345	318	8	M24	35	260	375	110	24	M24x65	700	760	
340	42	6	36	M20	M24	40	194	342	365	338	8	M24	35	280	370	190	24	M24x65	280	305	
	56	6	48	M24	M30	60	287	342	365	338	8	M24	35	280	370	190	24	M24x65	590	630	
	60	6	56	M24	M36	50	308	342	365	338	8	M24	35	280	420	125	24	M24x65	830	900	
360	42	6	36	M20	M24	40	194	362	385	358	8	M24	35	300	390	210	24	M24x65	315	340	
	56	6	48	M24	M30	60	288	362	385	358	8	M24	35	300	390	210	24	M24x65	660	700	
	68	7	64	M24	M36	70	337	362	385	358	8	M24	35	300	440	145	24	M24x65	950	1020	
380	56	6	48	M20	M24	40	200	382	405	378	8	M24	35	320	410	230	24	M24x65	350	380	
	60	6	56	M30	M30	60	294	382	405	378	8	M24	35	320	410	230	24	M24x65	730	770	
	68	7	64	M30	M36	70	346	382	405	378	8	M30	45	305	465	130	30	M30x80	1060	1140	
400	56	6	48	M24	M30	40	211	402	425	398	8	M24	35	340	430	250	24	M24x65	420	450	
	68	7	64	M30	M36	60	291	402	425	398	8	M24	35	340	430	250	24	M24x65	820	870	
	68	7	64	M30	M36	70	364	402	425	398	8	M30	45	325	475	145	30	M30x80	1240	1330	
420	56	6	48	M24	M30	40	217	422	445	418	8	M30	40	345	450	240	30	M30x80	465	500	
	68	7	64	M30	M36	60	318	422	445	418	8	M30	45	345	450	240	30	M30x80	1000	1070	
	72	8	64	M30	M36	70	380	422	445	418	8	M30	45	345	520	155	30	M30x80	1500	1600	

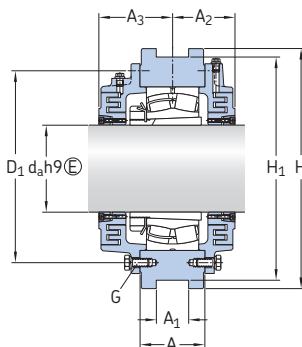
10.4

10.5 THD take-up housings for spherical roller bearings on an adapter sleeve on plain shafts

d_a 50 – 170 mm



Type AL
Non-locating bearing
Housing for shaft end

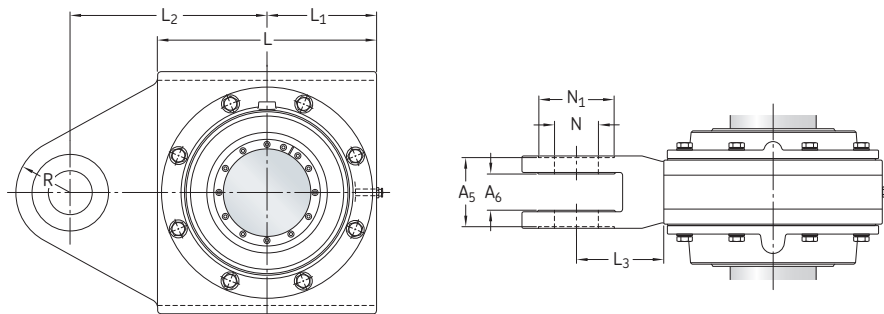


Type BF
Locating bearing
Housing for through shaft

Shaft diam.	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Adapter ring (incl.) Designation	Dimensions Housing						
					A	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆
d_a					A	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆
mm	-	-		-	mm						
50	THDD 2211	22211 EK	H 311	PSBD 50	60	34	49	55	38	42	22
55	THDD 2212	22212 EK	H 312	PSBD 55	66	43	50	60	41	50	26
60	THDD 2213	22213 EK	H 313	PSBD 60	78	53	50	63	53	66	30
70	THDD 2216	22216 EK	H 316	PSBD 70	78	53	62	70	49	66	30
80	THDD 2218	22218 EK	H 318	PSBD 80	78	53	67	83	63	66	30
90	THDD 2220	22220 EK	H 320	PSBD 90	69	40	76	92	70	70	36
100	THDD 2222	22222 EK	H 322	PSBD 100	78	53	85	97	75	76	40
	THDD 3222	23222 CCK/W33	H 2322	PSBD 100	90	53	91	103	76	100	44
110	THDD 2224	22224 EK	H 3124	PSBD 110	78	53	84	99	72	76	40
	THDD 3224	23224 CCK/W33	H 2324	PSBD 110	95	53	93	108	78	100	44
115	THDD 3226	23226 CCK/W33	H 2326	PSBD 115	100	63	103	108	79	112	52
125	THDD 2228	22228 CCK/W33	H 3128	PSBD 125	83	53	80	102	90	74	40
	THDD 3228	23228 CCK/W33	H 2328	PSBD 125	110	63	108	118	88	112	52
135	THDD 3030	23030 CCK/W33	H 3030	PSBD 135	85	45	77,5	98,5	74,5	100	60
	THDD 3230	23232 CCK/W33	H 2330	PSBD 135	120	73	113	123	93	126	62
140	THDD 3132	23132 CCK/W33	H 3132	PSBD 140	116	74	101	126	101	132	62
	THDD 3232	23232 CCK/W33	H 2332	PSBD 140	130	83	118	133	98	126	62
150	THDD 3034	23034 CCK/W33	H 3034	PSBD 150	102	63	88	113	93	112	52
	THDD 3134	23134 CCK/W33	H 3134	PSBD 150	120	63	113	136	100	122	62
160	THDD 3136	23136 CCK/W33	H 3136	PSBD 160	120	60	115,5	135,5	113,5	130	64
	THDD 3236	23236 CCK/W33	H 2336	PSBD 160	140	93	133	148	108	140	72
170	THDD 3038	23038 CCK/W33	H 3038	PSBD 170	112	73	101	126	96	165	90
	THDD 3138	23138 CCK/W33	H 3138	PSBD 170	140	93	128	148	108	140	72

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

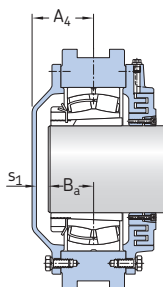
²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.



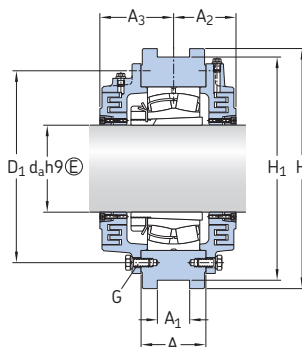
Shaft diam. d_a	Dimensions Housing											Shaft abutment		Mass Housing type	
	D_1	H	H_1	L	L_1	L_2	L_3	N	N_1	R	G	B_a	s_1	A	B
mm	mm											mm		kg	
50	115	150	135	150	75	105	30	20	40	30	M 8	27	5	10	10
55	130	165	150	165	82,5	120	37,5	25	50	35	M 8	30	5	12	12
60	140	180	155	160	80	145	65	30	60	40	M 8	35	11	16	16
70	155	200	175	180	90	155	65	30	60	40	M 8	36	6	22	23
80	180	230	200	210	105	170	65	30	60	40	M 8	40	16	29	30
90	195	250	220	235	117,5	185	67,5	35	70	40	M 8	45	18	35	37
100	215 230	270 300	240 270	255 270	125 135	200 195	70 60	40 50	75 95	45 60	M 8 M 12	50 60	18 9	40 70	45 74
110	230 245	290 310	260 280	275 290	135 145	210 205	70 60	40 50	75 95	45 60	M 8 M 12	55 64	10 7	45 75	48 80
115	260	335	305	300	155	220	75	60	110	70	M 12	66	5	80	85
125	275 290	330 360	300 330	315 330	155 170	230 235	70 75	40 60	70 90	45 70	M 12 M 16	62 72	20 8	56 95	61 101
135	245 305	320 385	290 355	280 360	140 180	235 260	90 80	50 70	95 120	70 80	M 10 M 16	56 78	10 7	45 118	52 126
140	310 330	370 400	340 370	370 380	185 190	350 270	160 80	61 70	110 120	90 80	M 12 M 16	75 84	18 6	136 140	146 150
150	280 330	360 380	330 350	325 375	165 190	255 395	90 160	45 60	100 160	70 80	M 10 M 12	66 78	20 17	76 150	83 184
160	350 360	440 450	410 410	400 420	200 210	360 300	85 90	80 80	140 140	100 90	M 16 M 16	82 90	23,5 10	160 165	172 178
170	315 365	390 450	360 410	380 420	195 210	350 300	130 90	45 80	120 140	70 90	M 12 M 16	72 88	16 12	135 166	141 176

10.5 THD take-up housings for spherical roller bearings on an adapter sleeve on plain shafts

d_a 180 – 400 mm



Type AL
Non-locating bearing
Housing for shaft end

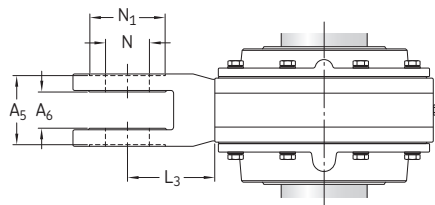
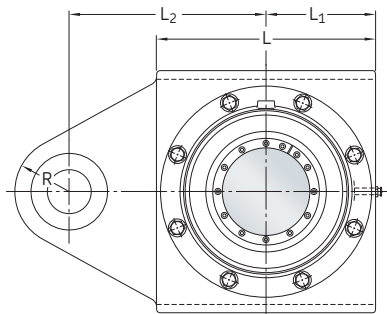


Type BF
Locating bearing
Housing for through shaft

Shaft diam. d_a	Housing	Appropriate parts Bearing ¹⁾	Adapter sleeve ²⁾	Adapter ring (incl.) Designation	Dimensions Housing						
					A	A ₁	A ₂	A ₃	A ₄	A ₅	A ₆
mm	–	–	–	–	mm						
180	THDD 3040	23040 CCK/W33	H 3040	PSBD 180	125	83	107	133	108	125	62
	THDD 3140	23140 CCK/W33	H 3140	PSBD 180	138	90	115	148,5	120	128	62
	THDD 3240	23240 CCK/W33	H 2340	PSBD 180	165	103	138	158	118	140	72
200	THDD 3044	23044 CCK/W33	OH 3044 H	PSBD 200	120	65	107	142	107	145	70
	THDD 3144	23144 CCK/W33	OH 3144 H	PSBD 200	150	103	135	160	135	144	74
	THDD 3244	23244 CCK/W33	OH 2344 H	PSBD 200	175	103	148	183	133	240	173
220	THDD 3148	23148 CCK/W33	OH 3148 H	PSBD 220	152	65	148	178	138	215	123
	THDD 3248	23248 CCK/W33	OH 2348 H	PSBD 220	190	103	148	188	148	240	173
240	THDD 3052	23052 CCK/W33	OH 3052 H	PSBD 240	135	65	110,5	150,5	120,5	215	123
	THDD 3152	23152 CCK/W33	OH 3152 H	PSBD 240	175	80	152	187	152	225	135
	THDD 3252	23252 CCK/W33	OH 2352 H	PSBD 240	205	103	167	208	158	240	173
260	THDD 3256	23256 CCK/W33	OH 2356 H	PSBD 260	210	123	178	218	163	240	173
280	THDD 3160	23160 CCK/W33	OH 3160 H	PSBD 280	195	103	165	210	170	240	173
	THDD 3260	23260 CCK/W33	OH 3260 H	PSBD 280	230	123	182	222	187	240	173
300	THDD 3164	23164 CCK/W33	OH 3164 H	PSBD 300	210	123	177	212	187	240	170
	THDD 3264	23264 CCK/W33	OH 3264 H	PSBD 300	250	123	192	237	187	300	213
320	THDD 3168	23168 CCK/W33	OH 3168 H	PSBD 320	220	150	197	242	237	300	180
	THDD 3268	23268 CAK/W33	OH 3268 H	PSBD 320	265	123	202	272	237	300	213
340	THDD 3272	23272 CAK/W33	OH 3272 H	PSBD 340	275	123	227	282	247	300	213
360	THDD 3176	23176 CAK/W33	OH 3176 H	PSBD 360	230	120	202	257	254	300	200
	THDD 3276	23276 CAK/W33	OH 3276 H	PSBD 360	295	123	232	297	257	300	213
380	THDD 3280	23280 CAK/W33	OH 3280 H	PSBD 380	300	123	242	307	257	300	213
400	THDD 3284	23284 CAK/W33	OH 3284 H	PSBD 400	315	123	252	317	267	300	213

¹⁾ Only typical bearings are listed. Other bearing variants can also fit the housing.

²⁾ Only typical adapter sleeves are listed. Other variants can also fit the housing.



Shaft diam.	Dimensions Housing											Shaft abutment		Mass Housing type	
	d_a	D_1	H	H_1	L	L_1	L_2	L_3	N	N_1	R	G	B_a	s_1	A
mm	mm											mm		kg	
180	340	430	400	390	200	275	85	70	120	80	M12	78	22	160	167
	380	440	420	440	220	300	80	60	110	80	M16	95	15	175	190
	405	500	460	470	235	325	90	80	140	90	M16	100	10	270	290
200	370	480	440	430	210	325	100	60	100	80	M16	80	17	200	220
	420	510	480	470	235	530	260	100	175	120	M16	100	25	240	255
	445	540	500	520	260	575	245	100	175	150	M20	112	11	380	400
220	455	540	500	520	260	515	250	100	250	150	M20	106	22	310	360
	490	580	540	560	280	600	250	100	175	150	M20	122	16	460	485
240	435	540	500	500	245	515	260	100	250	150	M16	92	16,5	269	280
	490	570	540	550	275	565	270	100	250	150	M20	118	24	400	460
	540	610	570	590	305	615	220	100	200	150	M20	132	16	545	580
260	555	650	610	630	315	630	220	100	175	150	M24	135	16	590	630
	600	670	630	670	335	650	220	100	175	150	M24	142	33	678	730
300	590	670	630	665	340	650	230	100	175	150	M24	135	40	650	690
	640	710	670	710	355	725	275	110	185	200	M24	152	21	800	860
320	630	740	700	740	370	720	310	120	240	200	M24	155	70	760	880
	680	750	700	750	375	750	285	110	185	200	M24	175	47	920	1000
340	710	790	740	790	395	765	275	110	185	200	M24	180	51	1050	1120
	745	820	780	810	420	780	310	110	230	200	M30	186	55	1200	1280
380	790	870	820	870	435	800	270	110	185	200	M30	196	45	1480	1580
	835	925	860	925	463	825	262	110	185	200	M30	212	39	1880	1980

10.5